Environmental Plan
April 2014

This Environmental Plan is comprised of the following plans:

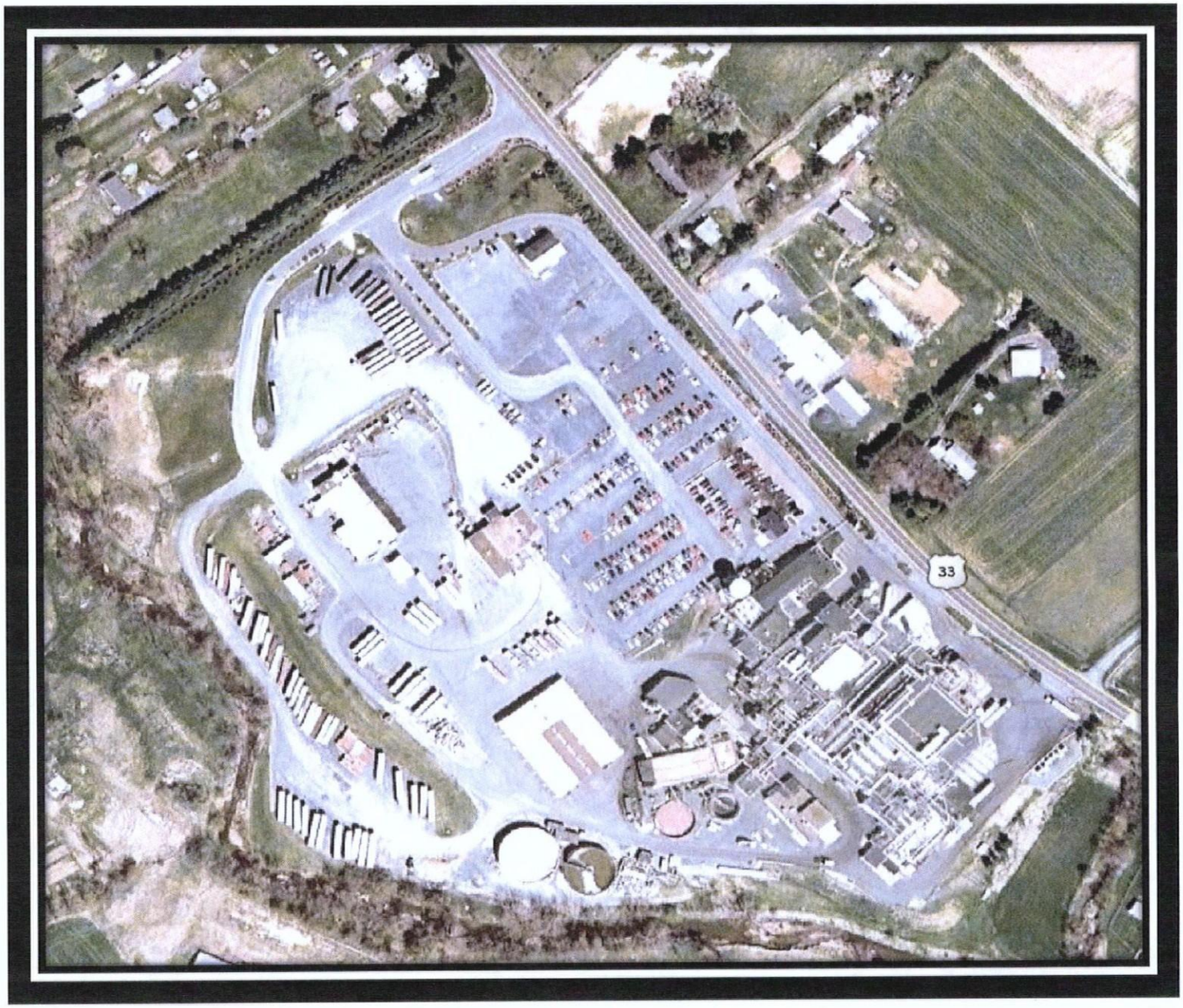
SWPPP	**S**TORM **W**ATER **P**OLLUTION **P**REVENTION **P**LAN
SWMP	**S**TORM **W**ATER **M**ONITORING **P**LAN
SR&CP	**S**PILL **R**ESPONSE & **C**LEANUP **P**LAN
SPCC	**S**PILL **P**REVENTION **C**ONTROL and **C**OUNTERMEASURES PLAN
GWPP	**G**ROUND**W**ATER **P**ROTECTION **P**LAN

Virginia Poultry Grower Coop

Hinton Processing Complex

6349 Rawley Pike
Hinton, VA 22831

(540) 298-8868



Copy for:

DEQ

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VIRGINIA POULTRY GROWERS COOPERATIVE

HINTON PROCESSING PLANT

Street Address:
6349 Rawley Pike
Hinton, VA 22831
540-867-4028

ENVIRONMENTAL PLAN

April 2014

Initial Submittal: June 2006
2nd Submittal: March 2007
3rd Submittal: March 2012
4th Submittal: April 2014
5th Submittal:

Plan prepared by
Blackwell Engineering, PLC
566 East Market Street
Harrisonburg, Virginia 22801
(540) 432-9555

This **Environmental Plan (E-Plan)** has been prepared for the facility known as the "Hinton Processing Plant" owned and operated by Virginia Poultry Growers Cooperative. This **E-Plan** consists of five primary components:

The **Storm Water Pollution Prevention Plan (SWPPP)** is in accordance with requirements of USEPA's NDPES General Permit Program for Storm Water Discharges Associated with Industrial Activity, and Virginia's General Permit No.:VA0002313. The SWPPP identifies potential sources of pollution that may reasonably be expected to affect the quality of storm water discharge from the facility. In addition, the plan describes and ensures the implementation of practices that will be used to reduce the pollutants in storm water discharges from the facility, and assures compliance with the terms of the issued general permit.

The **Storm Water Monitoring Plan (SWMP)** represents requirements applicable in Virginia's General Permit No.:VA0002313. Typically this plan is a subsection of the SWPPP, however, for ease of access and to provide convenience for monitoring this plan has been prepared to be a stand-alone document.

The **Spill Response & Cleanup Plan (SR&CP)** is typically a part of the SPCC plan. However, it has been prepared as a stand-alone document in case the facility is not required to prepare a SPCC plan.

The **Spill Prevention, Control and Countermeasures (SPCC) Plan** is required by the EPA's Oil Pollution Prevention Rule, Title 40, Code of Federal Regulations, Part 112 (40 CFR 112) when a facility meets three criteria: 1) it must be non-transportation related; 2) it must have an aggregate aboveground oil storage capacity greater than 1,320 gallons or a completely buried oil storage capacity greater than 42,000 gallons; 3) there must be a reasonable expectation of a discharge into or upon navigable waters of the United States or adjoining shorelines. Preparation of the SPCC is the responsibility of the facility owner or operator, but must be certified by a Professional Engineer if the facility has an aggregate aboveground oil storage capacity greater than 10,000 gallons.

The **Ground Water Prevention Plan (GWPP),** Virginia does not require a GWPP, however Virginia Poultry Growers is implementing procedures contained within this plan to protect ground water.

The **E-Plan** must be amended whenever there is a change in facility design, construction, operation or maintenance that has a significant effect on the potential for the discharge of pollutants to surface waters. The **E-Plan** must also be revised if it proves to be ineffective in eliminating or significantly minimizing pollutants from the sources identified.

DELEGATION OF AUTHORITY

I, Mickey Baugher, hereby designate the persons or specifically described positions below to be a duly authorized representative for the purpose of overseeing compliance with environmental requirements, including the VA/NDPES General Permit Program for Storm Water Point Source Discharges Associated with Industrial Activity, and Virginia's General Permit No.: VA0002313, at the Virginia Poultry Growers Cooperative, Hinton Processing Plant. The designees are authorized to sign any reports, storm water pollution prevention plans and all other documents required by the permit.

Ron Harrison
Facility Environmental Manager
Virginia Poultry Growers Cooperative
410 South Main Street
Broadway, VA 22815
(540) 867-4366

By signing this authorization, I confirm that I meet the requirements to make such a designation as set forth in Virginia's/NDPES General Permit Program for Storm Water Discharges Associated with Industrial Activity, and Virginia's General Permit No.:VA0002313, and that the designees above meets the definition of a "duly authorized representative" as set forth in permit.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature Mickey Baugher
Director of Environmental Affairs

Date 5-5-14

ENGINEER'S CERTIFICATION

I, Richard L. Blackwell III, P.E., having examined the Virginia Poultry Growers Cooperative, Hinton Processing Plant, and being familiar with the provisions of Virginia's regulations and 40 CFR 112, attest that this Environmental Plan has been prepared in accordance with good engineering practices. This Plan has been prepared based upon my examination of the site and upon operations information and documentation provided by Virginia Poultry Growers Cooperative with emphasis on the SARA TITLE III SECTION 313. This certification provides no assurance as to the accuracy or completeness of the information and documentation thus received. This certification in no way relieves the owner or operator of the facility of their duty to prepare and fully implement this Plan and to modify the Plan in accordance with the permit as may be appropriate.

Non-Storm Water Discharge Evaluation Determination
The site was most recently assessed for non-storm water discharges on 4/9/2014. Areas of direct observation were limited to those areas where process buildings and related industrial activities exist that result in discharges into storm water drainage systems. Remote and open areas and inactive process areas were not observed since non-storm water discharges are not reasonably expected to occur from them.

The method used to identify non-storm water discharges was visual observation of process areas and adjacent ditches during dry weather. It should be noted that the assessment only identified non-storm water discharges present at the time of the inspection. Non-storm water discharges that commenced after or were active on days other than the dates above, were not observed and are not noted below. If additional non-storm water discharges are identified, the Plan will be updated accordingly. Sections of this Plan identify appropriate pollution prevention measures for the discharges identified.

Weather at Time of Inspection: Sunny and 63°.

SW Outfall 001: The stormwater pipe from the employee parking had a small flow, approximate 3-4 gpm of clear water. There was no flow from the ICA collection system or stormwater pump station.

SW Outfall 002: There was no flow.
SW Outfall 003: There was no discharge.
SW Outfall 004: There was no discharge.

COMMONWEALTH OF VIRGINIA
RICHARD L. BLACKWELL III
Lic. No. 022422
4-30-14
PROFESSIONAL ENGINEER

Signature _____

Richard L. Blackwell III, P.E. Engineer

Date _____

REQUIRED ACTION AND UPGRADE LIST FOR CONFORMANCE

with Regulations

(40 CFR 112.7.a.1)

REQUIRED UPGRADE AND ACTION LIST The following fuel/oil storage tank systems modifications are necessary for this Facility for compliance with SPCC regulations and requirements. The Professional Engineer certification is provided with the condition these projects will be completed in a timely manner.

1. Inspect all stormwater pipes and replace if needed.

   Completed By: _____ Date Completed: _____

2. Remove sediment and debris from drop inlet structures during dry conditions.

   Completed By: _____ Date Completed: _____

3. Repair or replace spill containment for C4.

   Completed By: _____ Date Completed: _____

4. Check Surplus Equipment Temporary Storage Area (A6) once a week for items that should not be stored outdoors. Relocate items if needed.

   Completed By: _____ Date Completed: _____

5. Remove all empty drums/totes. All partial and full containers are to be relocated under roof.

   Completed By: _____ Date Completed: _____

The above required upgrade and action list will be completed. I understand the facility is not in compliance with this SPCC until such time as the above list is completed.

_____ _____

Facility Spill Response Coordinator Date

CERTIFICATION OF THE APPLICABILITY OF THE SUBSTANTIAL HARM CRITERIA

Facility Name: Virginia Poultry Growers Cooperative, Hinton Processing Plant
Facility Address: 6349 Rawley Pike, Hinton, Virginia 22831

1. Does the facility transfer oil over water to or from vessels and does the facility have a total oil storage capacity greater than or equal to 42,000 gallons?
   Yes _____ No __X__

2. Does the facility have a total oil storage capacity greater than or equal to 1 million gallons and does the facility lack secondary containment that is sufficiently large enough to contain the capacity of the largest aboveground oil storage tank plus sufficient freeboard to allow for precipitation within any aboveground oil storage tank area?
   Yes _____ No __X__

3. Does the facility have a total oil storage capacity greater than or equal to 1 million gallons and is the facility located at a distance such that a discharge from the facility could cause injury to fish or wildlife or sensitive environments?
   Yes _____ No __X__

4. Does the facility have a total oil storage capacity greater than or equal to 1 million gallons, and is the facility located at a distance such that a discharge from the facility would shut down a public drinking water intake?
   Yes _____ No __X__

5. Does the facility have a total oil storage capacity greater than or equal to 1 million gallons and has the facility experienced a reportable oil spill in an amount greater than or equal to 10,000 gallons within the last 5 years?
   Yes _____ No __X__

Certification

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document, and that based on my inquiry of those individuals responsible for obtaining this information, I believe that the submitted information is true, accurate, and complete.

Ronald Harrison 5/2/14
Signature Date

Ron Harrison
Director of Environmental Affairs

Table of Contents

Storm Water Pollution Prevention Plan

(SWPPP)

VIRGINIA POULTRY GROWERS COOPERATIVE

HINTON PROCESSING PLANT

Street Address:
6349 Rawley Pike
Hinton, VA 22831
540-867-4028

STORM WATER POLLUTION PRENTION PLAN (SWPPP)

1. FACILITY GENERAL INFORMATION

Virginia Poultry Growers Cooperative, Hinton Processing Plant is comprised of a poultry slaughter, eviscerate, cut-up, ice packs and chill packs for turkey for sale to retail and wholesale customers. Virginia Poultry Growers Cooperative is a supplier of prepared turkey to many of the best-known brands of prepared entrees in America.

In April of 2004 Pilgrims Pride, the previous owner of the Hinton Processing Facility, announced the closing of Operations within six months. Following this announcement, the owners of many of these farms banded together and VPGC was incorporated. Though faced with many challenges, VPGC found support in the local farm-oriented community, and raised the funds necessary to purchase the Hinton Processing plant and on November 29, 2004 VPGC began processing turkeys.

Live turkeys are delivered to the processing plan via truck and are slaughtered, eviscerated and processed into various fresh and frozen turkey meat products. These products are shipped from the facility to other end users (supermarkets, fast food stores, etc.), distributors, further processors, etc. for sale, further processing and/or consumption. The plant operates year round.

1.1	Facility Owner:	Virginia Poultry Growers Cooperative
	Owner Street Address:	6349 Rawley Pike
	Owner City, State, Zip Code:	Hinton, Virginia 22831
	Owner Phone:	(540) 867-4000
1.2	Facility Name:	Hinton Processing Plant
	Facility Street Address:	6349 Rawley Pike
	Facility City, State, Zip Code:	Hinton, Virginia 22831
	Latitude:	38°28'11.94"N
	Longitude:	78°58'42.50"W
	Permit Number:	VA0002313
	Is site located in Indian country?	No
	If Yes, name of Reservation:	N/A
	Is site considered a federal facility?	No
1.3	Facility Operations:	Virginia Poultry Growers Cooperative 6349 Rawley Pike Hinton, Virginia 22831
1.4	Facility SIC Code(s):	2015-Poultry Slaughter and Process

2. POLLUTION PREVENTION TEAM

A Storm Water Pollution Prevention Team has been established at the facility and charged with the responsibility of implementing, maintaining and revising this plan. The team members and their respective titles and responsibilities are listed below.

Name	Title	Responsibilities
Mickey Baugher	Complex Manager	• Overall responsibility for facility • Signatory authority • Responsible for complex operations
Woody Eppard	Safety Manager & **Facility Spill Response Coordinator**	• Ensure applicable employees are trained on SWPPP/BMP requirements • Responsible for good housekeeping and other BMP implementation • Communicate with Complex Management & Corporate Environmental Engineering personnel • Prevent non-storm water discharges
Wes Hoover	Processing Plant Manager	
Ralph Pettit	Live Haul Manager	• Prevent non-storm water discharges • Communicate with Complex Management & Corporate Environmental Engineering personnel
Roy Ruddle	Maintenance Manager	• Implement preventive maintenance program • Ensure SWPPP is current and updated
Eddie Raynes	Waste Water Operator	• Ensure applicable employees are trained on SWPPP/BMP requirements • Conduct inspections and sampling • Maintain applicable records
Ron Harrison	Corporate Environmental Affairs Manager	• Prepare and submit required reports to DEQ • Perform the annual Comprehensive Site Compliance Inspection and preparation of the associated written report
Rick Blackwell	Environmental Consultant	• Consult on Plan modifications • Review the Comprehensive Site Compliance Evaluation Report • Review the results of storm water sampling and analysis activities
Phil Miller	Engineering Manager	

3. PHYSICAL SITE DESCRIPTION (SEE MAPS)

3.1 The Processing Plant is located at 6349 Rawley Pike, Hinton, Virginia. The Hinton Processing Plant is located adjacent to Muddy Creek and the War Branch seven miles West of Harrisonburg on U.S. Route 33. The site encompasses approximately 38 acres. The Virginia Poultry Growers Cooperative Processing Plant property is bounded by residential/agricultural areas to the east of State Route 33. The area surrounding the plant site is relatively rural, with land use primarily being residential and agricultural.

The plant operates year round on a five (5) day week, eight (8) hour per day processing schedule (treating waste water 24 hours per day).

The average annual precipitation is approximately 52 inches.

3.2 The grounds of the Processing Plant slope gently both to the south and to the east. Drainage is toward the southeast into a drainage system that flows toward Muddy Creek (Outfall 001). Drainage from processing/contact areas is collected and receives complete biological treatment prior to discharging into Muddy Creek (Outfall 001). A majority of the stormwater is collected in a series of drop inlets and other stormwater collection systems and treated onsite in a wastewater treatment system and remaining stormwater ultimately discharges to Outfalls 002 or 003 toward War Branch. The "Facility Site Map" found in the tab labeled **MAPS** provides illustrates these areas.

4. SUMMARY OF POTENTIAL POLLUTANT SOURCES

This section contains an inventory and description of areas, materials and activities at the site that may contribute significant amounts of pollutants to storm water and concludes with an assessment of the risks potential sources of pollution pose to storm water quality.

4.1 Exposed Areas: The site is divided into two primary exposure concept groupings. The Facility Storm Water Map found in tab labeled **MAPS,** delineate the exposure areas, show general facility topography and identify areas where significant materials and industrial activity are exposed to storm water. For items identified on the maps, Table 4.1 identifies the types of pollutants likely to be present in the storm water.

Industrial Contact Area (ICA) refers to land surrounding the facility where industrial activities occur that have a possibility of storm water contact with potential contaminate materials. The SWPPP is designed to reduce the chances of storm water contact with potential contaminate materials.

General Drainage Areas (GDA) are other drainage areas not in the industrial contact areas. Storm water runoff from the general drainage area is considered free of contaminate contact and is not addressed within this plan.

Table 4.1 Potential sources of storm water pollution.

Drainage Area	Industrial Materials or Activities Potentially Exposed to Storm Water		Pollutants
ICA-1 Collected	A1	Unloading/Receiving Area	BOD5, TSS, O&G, TKN
	A2	Loading/Shipping Area	BOD5, TSS, O&G, TKN
	A3	Trailer Parking Area	TPH, BOD5
	A4	Truck Parking Area	TPH, BOD5
	A6	Surplus Equipment Temp Storage	TPH, BOD5
	A7	Trash Compactor for dry materials	BOD5, TSS, O&G, TKN
	A8	Scrap Metal Dumpster	Metals
	A9	Fueling Station	TPH
	A10	Waste Water Treatment	BOD5, TSS, O&G, TKN
	C1	Sanitation Chemicals	TPH
	C2	Sanitation Chemicals	TPH
	C3	Sanitation Chemicals	TPH
	C4	Sulfuric Acid	TPH
	P1	Fuel Oil	TPH
	P2	Kerosene	TPH
	P3	Diesel Fuel	TPH
	P4	Gasoline	TPH
	P5	Diesel Fuel (off road)	TPH
	P6	Motor Oil	TPH
	P8	Hydraulic Oils	TPH
	P9	Misc. Plant Oils	Low
	W1	Waste Oil	Low
	W2	Waste Oil	Al, pH
	W3	Waste Oil	Low
	W4	Waste Oil	TSS, pH
ICA-2 Collected	A2	Loading/Shipping Area	BOD5, TSS, O&G, TKN
	A3	Trailer Parking Area	TPH, BOD5
	A4	Truck Parking Area	TPH, BOD5
	P7	Frick Oil	TPH
	W1	Waste Oil	TPH
GDA-1	A5	Employee Parking Area	TPH
GDA-2	A3	Trailer Parking Area	TPH, BOD5
	A4	Truck Parking Area	TPH, BOD5
GDA-3		Grass area no activity	
GDA-4	A3	Trailer Parking Area	TPH, BOD5
	A6	Surplus Equipment Temp Storage	TPH, BOD5
	A10	Waste Water Treatment	BOD5, TSS, O&G, TKN
	C5	Aluminum Chloride	TPH
GDA-5	A6	Surplus Equipment Temp Storage	TPH, BOD5

4.2 Facility Exposed Areas: This facility has two (2) Industrial Contact Area and five (5) General Drainage Areas. (See tab **Maps**)

4.2.1 **ICA-1** is located to in the center portion the property and includes the Truck Shop, the Live Shed, Trailer Wash, live receiving, offal, Boiler Room, Wastewater Pre-Treatment, Cafeteria, and the back of the Processing Plant. Stormwater from this area surface flows to the stormwater pump station where it is stored in tanks and then processed with poultry plant wastewater with ultimate discharge to permitted Outfall 001. Stomwater flows exceeding the pumping rate overflows to stomwater outfall 002 (SWO-2).

4.2.2 **ICA-2** is located to the east of the processing plant and includes the shipping dock and refrigeration. Stormwater runoff from this area surface flow into a drop inlet and then pumped into the wastewater pre-treatment system with ultimate discharge to permitted Outfall 001. Stomwater flow exceeding the pumping rate, overflows to stormwater outfall 003 (SWO-3).

4.2.3 **GDA-1** is located along the front portion of the property on the south west side of Rawley Pike (US Route 33). The area covers the whole employee parking lot (A5) where stormwater surface flows into drop inlet that is pipe to a ditch discharging into War Branch. This discharge location is designated as Storm Water Outfall 2 (SWO-2).

4.2.4 **GDA-2** is located between the guard house and the truck shop, and includes the clean live haul trailer parking area. Stormwater surface flow to the south west and is collected into a culvert under the main facility drive. GDA-2 runoff is discharge into GDA-3. There is no designated storm water discharge outfall for this area.

4.2.5 **GDA-3** is the grassy area along the west property line, right of the entrance continuing to the back portion of the property (War Branch). Stormwater runoff from this area basically surface flow to a bottom area along the north bank of War Branch where infiltration occurs with low intensity rain events and a discharge into War Branch for high intensity events. There is no designated storm water discharge outfall for this area.

4.2.6 **GDA-4** is the trailer parking gravel area along the back portion of the property adjacent to War Branch and including part of the wastewater biological treatment system. A portion of the stormwater runoff sheet flows into War Branch, however a portion flows through a rock check, filtration structure prior to discharge into War Branch. This discharge location is designated as Storm Water Outfall 4 (SWO-4).

4.2.7 **GDA-5** covers the grassy area along the south and east property line, running from the back of the property to the Route 33 Muddy Creek Bridge. All stormwater sheet flows or infiltrates in the grasses bottom land along Muddy Creek and War Branch. There is no designated storm water discharge outfall for this area.

4.3 Inventory of Exposed Materials

4.3.1 Materials Unloading Operations (A1): The primary activities affording opportunities for the potential exposure of pollutants to stormwater are related to material loading and unloading operations and associated activities. Trucks delivering bulk liquids may release pollutants that are transferred during stormwater events into the facility drainage system

where the runoff can be collected and responded to if necessary. Virginia Poultry Growers Cooperative has determined that loading and unloading operations is the greatest risk potential at this site, therefore all vendors are to be informed of proper unloading operations. Vendors can be asked to sign a Vendor Responsibility Letter that delineates the steps for proper loading or unloading of products (see Tab **Vendor Letter**). A signed copy of this Vendor Letter will be kept on file at the facility. All Virginia Poultry Growers Cooperative employees associated with tank unloading operations are to be trained in proper procedures. Stormwater is monitored and corrective actions taken as deemed appropriate to facilitate stormwater runoff.

a. Live turkeys are delivered to the facility in cages, which are loaded onto flat bed trailers. Upon delivery to the facility, these trailers are typically parked in a Live Cooling/Holding shed for temporary storage. A Live Holding Shed is located on the southern side of the property in ICA-1. Significant poultry litter is deposited in the Live Holding Sheds, and this material is routinely removed as part of the facility's sanitation program. Cleaning operations for these areas include dry sweeping and/or wash down with high pressure water hoses. Wash down water from the Live Holding Sheds is collected in a series of sediment traps/flush stormwater collection basins. Water collected in these basins is discharged to the onsite wastewater treatment system for treatment and discharge through Outfall 001.

b. Trucks delivering live poultry to the unloading area at the Hanging Room may release pollutants that are transferred during storm events into the plants drainage system where runoff can be collected and treated by the plant's pretreatment system. The Hanging Room and surrounding areas are cleaned each day. Cleaning operations for these areas include dry sweeping and/or wash down with high pressure water hoses. Wastewater generated from materials unloading and wash down operations in the Hanging Room area (A1) drain to the controlled runoff drain and are collected and treated by the plant's pretreatment system.

4.3.2 Materials Loading Operations (A2): Other opportunities for the potential exposure of pollutants to storm water are related to material loading operations. All Virginia Poultry Growers Cooperative employees associated with tank loading operations are to be trained in proper procedures. These areas require regular dry-cleanup to minimize the potential for stomwater contamination.

ICA-1 and ICA-2 contains the loading/shipping area of the plant (A2). Grate drain systems are installed against the plant building in the loading dock areas and these drains are tied into the facility's process wastewater collection system. The pads for the loading docks are also sloped toward the grate drains to capture incidental spillage during product loading and materials receiving operations. Drainage from ICA-1 and ICA-2 storm runoff is captured by a wastewater treatment pump and is treated by the onsite wastewater treatment facility.

4.3.3 Trailer Parking (A3): Facility operations utilize onsite trailer parking. Occasionally feed, grease, or other operationally related materials could impact stormwater runoff quality. These areas require periodic walkover to insure proper operation and equipment maintenance.

4.3.4 Truck Parking (A4): This activity has potential for vehicle fluids to contact stormwater. Motor oils, diesel fuel, antifreeze, grease and lubrication oils may drip onto the ground surface. These areas are to be periodically inspected to insure proper truck maintenance. Trucks with observed drippage are to be maintenance immediately.

4.3.5 Employee Parking (A5): Virginia Poultry Growers Cooperative is not responsible for employee's personal equipment, and will not accept environmental risks due to improper maintenance of employee's vehicles. These areas are to be inspected periodically and if drippage is found the owner of the identified vehicle will be required to remove their vehicle from the premises until properly maintained.

4.3.6 Surplus Equipment Temporary Storage (A6): Equipment that has been removed for operation is stored in the temporary storage area after referred to as the "Bone Yard". Several times each year the area is cleared with equipment either being removed from the site or placement into permanent storage. All gear boxes are to be drained of oil, excess grease is to be removed from motors, bearing, etc., and equipment is to be cleaned prior to placement in the laydown area.

4.3.7 Dumpster (A7): Waste material is picked up and dumpsters are emptied by a contract service at regularly scheduled intervals.

4.3.8 Scrap Metal Dumpster/Trash Compactor (A8): Waste material is picked up and dumpsters are emptied by a contract service at regularly scheduled intervals or when dumpster is full.

4.3.9 Vehicle Fueling Island (A9): Fueling of authorized company equipment occurs at the fueling island or designated fueling location only. Only authorized Virginia Poultry Growers Cooperative employees are allowed to use fueling equipment. All spills or accidental releases will receive immediate response. It is recommended that a small spill kit be located at this area.

4.3.10 Water/Wastewater Treatment (A10): The Hinton Processing Plant has an on-site wastewater pretreatment facility that receives all processing wastewater and a portion of the stormwater. All of the wastewater and stormwater is then treated prior to release into Muddy Creek (Outfall 001) under the facility's NPDES Permit No. VA0002313.

4.3.11 Containerized Raw Materials Used in Production: No exposure from containerized raw materials to stormwater exists that may result in an offsite discharge with the exception of specific cases that are addressed in other sections of this Plan.

4.4 Bulk Liquid Storage:

Bulk liquids used at this facility may be stored in one of three methods.

- Underground Storage Tanks (UST) – All bulk tanks are double walled.
- Aboveground Storage Tanks (AST) – All bulk tanks are within secondary containment.
- Area storage – location within structures that are designated for temporary or movable containers.

4.4.1 Petroleum Products: All facility **AST**'s are either located with secondary containment or within a building structure capable of emergency response. Secondary containment structures are adequately sized to contain at least 110% of the volume of the largest AST in the containment area. Where applicable, the secondary containment areas are equipped with a roof to minimize the entry of rainfall or with a drain line and lockable valve to allow the removal of any rainwater that may accumulate in the area. Both bottom and top fill design ASTs are installed at the facility. Check valves and/or other valving systems are provided on the bottom-fill design ASTs to prevent significant backflow of fuel/oil from the AST through the fill lines.

- **(P1)** Fuel Oil is delivered by truck to the storage tank where the fuel is stored in a double walled above ground storage tank. The tank is located adjacent to the boiler room.

- **(P2)** Kerosene is delivered by truck to the storage tank where the fuel is stored in an above ground storage tank. The tank is located within containment, and has both a roof to shield rain, and a containment area with lockable drain.

- **(P3)** Diesel fuel is delivered by truck to the storage tank where the fuel is stored in an above ground storage tank. The tank is located within containment, and has both a roof to shield rain, and a containment area with lockable drain.

- **(P4)** Gasoline is delivered by truck to the storage tank where the fuel is stored in an above ground storage tank. The tank is located within containment, and has both a roof to shield rain, and a containment area with lockable drain.

- **(P5)** Off Road Diesel fuel is delivered by truck to the storage tank where the fuel is stored in an above ground storage tank. The tank is located within containment, and has both a roof to shield rain, and a containment area with lockable drain.

- **(P6)** Motor Oils are delivered by truck in totes to the facility. It is stored in a roofed area with containment and control of any leakage.

- **(P7)** Frick Oil is delivered by truck in totes to the facility. It is stored in a roofed area with containment and control of any leakage.

- **(P8)** Hydraulic Oils are delivered by truck in totes to the facility. It is stored in a roofed area with containment and control of any leakage.

- **(P9)** Misc. Plant Oils are delivered by truck in totes to the facility. It is stored in a roofed area with containment and control of any leakage.

- **(W1)** Waste Oil: there are four (4) double walled waste oil receptacles. Location varies, between the HAZ Waste Shed, outside Maintenance or outside Refrigeration.

- **(W2)** Waste Oil is stored in an UST located behind the truck shop. Content is used within the waste oil heating system or removed from the site by a waste oil recycle company.

- **(W3)** Waste Oil is an AST within the truck shop that stores waste oil to be used within the truck shop heating system.

- **(W4)** Waste Oil is stored in either drums or totes to be used in the truck shop heating system. The area has containment and a roof for protection from the rain.

4.5 Chemical Products:

This Plan will be revised if future conditions and stormwater sampling results indicate current measures to be ineffective.

- **(C1-C3)** Sanitation Chemicals are delivered by truck to a designated building. The tanks are located within building providing containment.

- **(C4)** Sulfuric Acid is delivered by truck to a designated building. The tank is located within containment, within a building.

- **(C5)** Aluminum Chloride is delivered by truck to a designated building. The tank is located within containment, within a building.

4.6 Pesticides:

No pesticides are applied at this facility that has contact with stormwater.

4.7 Vehicle Maintenance Facility Operations:

Vehicle maintenance is conducted by ~~Pilgrim's Pride~~ RBH VPG-C, LLC on their truck fleet. The operation performs its own maintenance and repair operations for trucks and other vehicles (pick-up trucks, forklifts, etc.) used in feed and poultry distribution. Truck maintenance and repair operations performed at the facility include:

- Tire changing and repair;
- Brake work;
- Oil changing and other lubricating operations;
- Maintenance and repair of hydraulic systems;
- Vehicle washing operations;
- Vehicle fueling;
- Air conditioner/heater work; and
- Other maintenance and repair operations for vehicles, engines, trailers, forklifts, etc.

These operations are generally conducted inside the truck garage under cover.

Various fluids are used and/or generated in vehicle maintenance operations, and these materials are stored in both bulk ASTs and smaller containers. These products include diesel fuel, gasoline, lubricating oil, hydraulic oil, used oil, antifreeze, brake fluids, etc. Bulk ASTs are used for the storage of the lubricating oil, hydraulic oil, used oil, and antifreeze, and these ASTs are located inside the truck garage building and under cover.

4.8 Vehicle Fueling Island:

There is a fueling island on the property which serves the Virginia Poultry Growers Cooperative Truck Fleet. Gasoline is stored in an AST, (P4), Diesel fuel AST (P3) and Off Road Diesel (P5). These aboveground tanks are properly maintained in secondary containment and routinely checked for leaks and overall integrity.

4.9 Risk Identification & Summary of Potential Pollutant Sources: Based upon the above review of facility drainage, inventory of exposed materials, spill history, and available sampling data, the plant is in process of developing adequate control measures and procedures to prevent significant material from entering Virginia's waterways. Pars of the preceding sections and Section 7.0 describe measures and controls employed for the sources identified in the "Activities with a Higher Potential Pollutant Risk".

Activities with a Higher Potential Pollutant Risk	
Activity Code	**Description of Activity**
A1	Live Poultry Unloading Area
A1	Bulk liquid Unloading
A9	Equipment Fueling

5. SPILLS AND LEAKS

Any spills or leaks will be documented on the Spill Documentation Form and the Spill Incident Summary Log in tab labeled **Spill Event Forms** in this E-Plan.

6. SAMPLING PROCEDURES AND DATA

Sampling and monitoring procedures are detailed within the **Storm Water Monitoring Plan.**

7. STORM WATER CONTROLS

The SWPPP addresses specific measures and controls, also referred to as Best Management Practices (BMPs), that exist or are planned to be implemented at the facility. There are two types of BMPs: Non-Structural and Structural.

7.1 Non-Structural BMPS focus on preserving open space, protecting natural systems, and incorporating existing landscape features such as wetlands and stream corridors into a site plan to manage storm water at its source. The required baseline BMPs follow:

- Good housekeeping;
- Preventive maintenance;
- Spill prevention and response procedures;
- Inspections;
- Employee training;
- Recordkeeping and internal reporting procedures;
- Sedimentation and Erosion Control
- Management of runoff

These baseline BMPs and any site specific BMPs are addressed in the following subsections of this Plan.

7.1.1 Good Housekeeping: is a continuous practice, carried out by various departments at the facility. Housekeeping is a major management objective, and it is the policy to minimize and remove materials which are exposed to wind and rainfall. Elements of the site housekeeping program related to storm water management follow:

- Preventive maintenance and repair of process equipment and pollution abatement equipment is performed so as to minimize the possibility of storm water contact with significant materials (e.g., not conducted during rain events; absorbent or ground cover material used to contain spills).
- The loading and unloading areas are cleaned on an as needed basis by facility personnel.
- An open trash dumpster/trash compactor is used for collecting miscellaneous trash at the facility. Materials collected in the dumpsters are hauled off-site as needed.
- The paved areas are kept clean of refuse and debris. Storm water catch basins inlets are also kept free of debris.
- Materials stored in the equipment laydown area are periodically removed and disposed of by a contract service.
- Water shall not be used to flush spilled materials into storm water collection or discharge systems.
- Fuel, oils, fat, and other chemicals shall be received and stored at the designated locations only.
- All spills of fuel, oil, coolants, etc. shall be promptly cleaned-up.
- Current Material Safety Data Sheets (MSDS) are maintained at the facility. This information is maintained for hazardous and other applicable substances used and/or stored at the facility.
- All containers stored onsite are provided with adequate labels, which indicated the product name.
- Drip pans shall be used to contain incidental product spillage during hose/piping connects and disconnects associated with product transfers, product sampling, equipment/vehicle maintenance activities, etc.

7.1.2 Preventive Maintenance: Systems and equipment critical to protection of the environment and worker health and safety are identified upon installation or during safety and environmental plant inspections. The preventive maintenance program consists of scheduling and recordkeeping of regular maintenance events through the facility work order system.

The spill management team will study causes and remedies of all identified non-storm water discharges to determine if additional maintenance, modification or repair is technically and economically feasible to eliminate them.

7.1.3 Spill Prevention & Response Procedures: A more detailed spill prevention and response plan can be found in the Spill Response and Cleanup Plan.

7.1.4 Inspections: The following regular inspections are performed at the facility (**See Inspection Forms Tab**):

- The annual Comprehensive Site Compliance Inspection shall include an inspection of all areas where industrial materials are stored or industrial activities take place that are exposed to storm water.
- During the semi-annual sampling events the sampling personnel will visually inspect the outfall areas and other storm water conveyances (ditches and drains) to ensure they are operating properly.
- Secondary containment areas are regularly inspected for leaks.
- Maintenance inspections are routinely performed on all processing equipment. All pumps and piping systems are checked to insure they are operable for the transfer of liquids.
- Pressure vessels for ammonia are inspected annually in accordance with State law and to satisfy insurance requirements. Additionally, tanks are visually inspected as a part of routine operations for any evidence of leaks or spills.
- Piping located on the roof is observed approximately weekly during the performance of routine maintenance activities. Not all piping is observed at any one time but the routine nature of the activity provides relative assurance of the integrity of these piping systems.

7.1.5 Employee Training: Annual storm water pollution prevention training will be provided to all employees that work in areas where industrial materials or activities are exposed to storm water and to employees that are responsible for implementing activities identified in this Plan (see Tab **Training Log Form & Guide**). The training module will include the following:

- Explanation of storm water pollution;
- Good housekeeping and other BMPs employed at the facility;
- Locations of storm water outfall points affected by operations in which the employee works;
- Review of Plan components; and
- Spill response procedures.

7.1.6 Recordkeeping & Internal Reporting Procedures: Virginia Poultry Growers Cooperative maintains records to demonstrate compliance with this E-Plan. A copy of this SWPPP, any reports and all data used will be maintained for 5 years. Records of all monitoring and sampling information must be retained for at least 6 years from the date of collection. The following records are kept:

- Records of spills, releases and process malfunctions that potentially effect or may affect storm water quality (Tab Titled **"Spill Event Forms"**);
- Results of appropriate inspections performed as described in (Tab Titled **"Inspection Forms"**); and

- Results of the annual Comprehensive Site Compliance Inspection performed (Tab Titled **"Inspection Forms"**).

Required reporting procedures are discussed in the Storm water Monitoring Plan.

7.1.7 Sedimentation & Erosion Control: Areas at the facility which present a significant potential soil erosion concern are as follows:

- Banks of War Branch & Muddy Creek; and
- Thinly grassed or bare areas at miscellaneous locations around the facility property.

The gravel surfaced areas will be monitored for signs of erosion. Turf will be maintained to provide filtering capabilities. Thinly grassed areas at the facility will be graded as required, and turf will be established or improved to reduce erosion from these areas.

7.1.8 Management of Runoff: Virginia Poultry Growers Cooperative employs traditional storm water management (i.e., discharge control) practices in areas where control of the source of pollutants is not practical and in conjunction with the operation of its wastewater treatment program.

Storm water from industrial contact area(s) is collected and treated at the facility's waste water treatment plant and then released.

The loading and unloading areas of the plant are washed down as needed by the sanitation crew. Runoff from the washdown operation as well as storm water runoff is controlled.

7.2 Structural BMP's

A structural BMP is a physical device. It is typically designed and constructed to trap or filter pollutants from runoff, or reduce runoff velocities. The following are a list of typical structural BMPs.

Recognized BMPs are listed below. If these BMPs are found on the site, please adhere to criteria contained within the appropriate subsection.

7.2.1 Vegetated Filter Strip (if present):

a. Definition: A vegetated filter strip is a densely vegetated strip of land engineered to accept runoff from upstream development as overland sheet flow. It may adopt any naturally vegetated form, from grassy meadow to small forest.

b. Purpose: The purpose of a vegetated filter strip is to enhance the quality of storm water runoff through filtration, sediment deposition, infiltration and absorption.

c. Water Quality Enhancement: Vegetated filter strips are occasionally installed as a standard feature in residential developments. To be used as a water quality BMP, however, filter strips must comply with certain design criteria. Vegetated filter strip designs should include specific construction, stabilization, and maintenance specifications. The most significant requirement is for runoff to be received as sheet flow. Certain enhancements may be necessary, such as added vegetation and grading

specifications, or the use of level spreaders, to ensure that runoff enters the filter strip as sheet flow.

d. Maintenance/Inspection Guidelines: Vegetated filter strips require regular maintenance. Field studies indicate that these BMPs usually have short life spans because of lack of maintenance, improper location, and poor vegetative cover.

The following maintenance and inspection guidelines are **NOT** all-inclusive. Specific facilities may require other measures not discussed here. It is the designer's responsibility to decide if additional measures are necessary. Filter strips should be inspected regularly for gully erosion, density of vegetation, damage from foot or vehicular traffic, and evidence of concentrated flows circumnavigation the strip. The level spreader should also be inspected to verify that it is functioning as intended.

Inspections are critical during the first few years to ensure that the strip becomes adequately established. Maintenance is especially important during this time and should include watering, fertilization, re-seeding as needed.

To increase the functional longevity of a vegetated filter strip, the following practices are recommended:

- *Regular removal of accumulated sediment*
- *Periodic reestablishment of vegetation in eroded areas or areas covered by accumulated sediment*
- *Period weeding of invasive species or weeds*
- *Periodic pruning of woody vegetation to stimulate growth*

7.2.2 Grassed Swale (with check dams)(if present):

a. Definition: A grassed swale is a broad and shallow earthen channel vegetated with erosion resistant and flood-tolerant grasses. Check dams are strategically placed in the swale to encourage ponding behind them.

b. Purpose: The purpose of grassed swales and water quality swales is to convey storm water runoff at a non-erosive velocity in order to enhance its water quality through infiltration, sedimentation, and filtration. Check dams are used within the swale to slow the flow rate and create small, temporary ponding areas. A water quality swale is appropriate where greater pollutant removal efficiency is desired.

c. Water Quality Enhancement: Water quality swales are specifically engineered to filter storm water though an underlying soil mixture while grasses swales are designed to slow the velocity of flow to encourage settling and filtering through the grass lining. Vegetation filters out the sediments and other particulate pollutants from the runoff and increases the opportunity for infiltration and adsorption of soluble pollutants. The flow rate becomes a critical design element, since runoff must pass through the vegetation slowly for pollutant removal to occur.

d. Maintenance/Inspection Guidelines: Maintenance of grassed swales includes upkeep of the vegetative cover and preservation of the swale's hydraulic properties. To ensure continued long term maintenance, all affected landowners should be made aware of their intendance responsibilities, and maintenance agreements should be included in land titles. The following maintenance and inspection guidelines are not intended to be

all-inclusive. It is the engineer's responsibility for determining if any additional items are necessary:

- Vegetation: A dense and vigorous grass cover should be maintained in a grassed swale. Periodic mowing is required to keep the swale operation properly. Grass should never be cut to a height of less than 3 inches. Stabilization and reseeding of bare spots should be performed, as needed.
- Check Dams: Periodic removal of sediment accumulated behind the check dams should be performed as needed.
- Debris and Litter Removal: The accumulation of debris (including trash, grass clippings, etc) in the swale can alter the hydraulics of the design and lead to additional maintenance costs. As with any BMP, frequent inspections by the land owner will help prevent small problems from becoming larger.
- Sediment Removal: The sediment that accumulates within the swale should be manually removed and the vegetation reestablished. If accumulated sediment has clogged the surface pores of the swale, reducing or eliminating the infiltration capacity, then the surface should be tilled and reestablished.

7.2.3 Constructed Storm Water Wetland (if present):

a. Definition: Constructed storm water wetlands are manmade shallow pools that create growing conditions suitable for both emergent and aquatic vegetation.

b. Purpose: Constructed wetlands are intentionally installed on non-wetland sites to enhance the quality of storm water runoff. The primary function of a *constructed wetland* is to provide those same types of pre-treatment functions within the wetland itself.

c. Water Quality Enhancement: A constructed storm water wetland can achieve high removal rates of particulate and soluble pollutants (nutrients) through gravitational settling, wetland uptake, absorption, physical filtration, and biological decomposition.

d. Maintenance/Inspection Guidelines: Constructed storm water wetlands require periodic maintenance as does any storm water BMP. In addition, a constructed wetland will require active management of the hydrology and vegetation during the first few years or growing seasons in order for it to achieve the performance and functions for which it was designed.

Vehicular access and maneuvering room in the vicinity of a constructed wetland (and sediment for eBay) is necessary to allow for long-term maintenance. In addition, the establishment off an on-site sediment disposal area, properly located and contained, will significantly reduce the cost of routine maintenance and sediment removal.

7.2.4 General Infiltration Practices (if present):

a. Definition: Infiltration facilities temporarily impound storm water runoff and discharge it via infiltration into the surrounding soil.

b. Purpose/Water Quality Enhancement: Infiltration facilities are primarily used for water quality enhancement. Their use to control large volumes of runoff for flooding and

channel erosion control is often impractical. Infiltration practices are appealing in that they help to reverse the hydrologic consequences of urban development by reducing peak discharge and providing groundwater recharge.

c. Maintenance/Inspection Guidelines: The maintenance requirements for a selected infiltration practice must be considered during the planning and design of the facility. Surface facilities such as basins and swales can be visually inspected and easily maintained. The surface of an infiltration trench or dry well can also be visually inspected and maintained if they are constructed at grade. Since their subsurface storage areas cannot be inspected above ground, **observation wells must be required**. Maintenance of the subsurface storage areas, however, short of excavating the facility, is very difficult. Therefore, landowners, developers and local program administrators have been encouraged from using infiltration facilities.

7.2.5 Bioretention Basins (if present):

a. Definition: Bioretention is an innovative BMP developed by the Prince George's County, Maryland Department of Environmental protection. There are seven major components to the bioretention area (Rain Garden): 1) the grass buffer strip; 2) the ponding area; 3) the surface mulch and site soil; 4) the sand bed (optional); 5) the organic layer; 6) site material, and 7) the infiltration chambers. Each component is critical to sustaining a properly functioning BMP.

b. Purpose: Bioretention basins are used primarily for water quality control. However, since they capture and infilter part of the storm water from the drainage shed, they may provide partial or complete control of stream bank erosion and partial protection from flooding (depending on the volume of water being captured and infiltered).

Bioretention facilities (Rain Gardens) are site areas installed in shallow basins in which the storm water runoff is treated by filtering through the bed components, biological and biochemical reactions within the soil matrix and around the root zones of the Virginia Poultry Growers Cooperative Hinton Processing Plant, and infiltration into the underlying soil strata.

c. Water Quality Enhancement: Bioretention basins enhance the quality of storm water runoff through the processes of adsorption, filtration, volatilization, ion exchange, microbial and decomposition prior to exfiltration into the surrounding soil mass.

d. Maintenance/Inspection Guidelines: The following maintenance and inspection guidelines are not intended to be all inclusive. Specific facilities may require additional measures not discussed here.

- Planting Soil: Testing of the pH of the organic layer and soil, should precede the limestone application to determine the amount of limestone required

  Soil testing should be conducted annually so that the accumulation of toxins and heavy metals can be detected and prevented.

  The preventative measures would include the removal of the contaminated soil. In some cases, removal and disposal of the entire soil base as well as the site material may be required.

- Mulch: Bioretention areas should be mulched once the Planting of trees and shrubs has occurred.
- Site Materials: Ongoing monitoring and maintenance is vital to the overall success of bioretention areas. Annual maintenance will be required for Site material, mulch layer, and soil layer. A maintenance schedule should include all of the main considerations discussed below. The maintenance schedule usually includes maintenance as part of the construction phase of the project and for life of the design.

Soil and mulch layer maintenance will be most likely limited to correcting areas of erosion. Site material upkeep will include addressing problems associated with disease or insect infestations, replacing dead material and any necessary pruning.

7.2.6 General Intermittent Sand Filter Practices (if present):

a. Definition: Intermittent sand filter facilities capture, pretreat to remove sediment, store while awaiting treatment, and treat to remove pollutants (by percolation through sand media) the most polluted storm water (the water quality volume) from a site.

b. Purpose/Water Quality Enhancement: Intermittent sand filter facilities are primarily used for water control. However, they do provide detention and show release of the water quality volume from the site being treated.

c. Maintenance/Inspection Guidelines: The maintenance requirements for intermittent sand filters must be considered during the planning and design of the facility. All chambers of underground sand filters must have personnel access manholes and built-in access ladders. Access roads or streets must be of sufficient width and bearing capacity to support dump trucks loaded with accumulated sediments or heavy vacuum (e.g."VACTOR") trucks for removing accumulated sediments and hydrocarbons from sediment chambers and traps on a regular basis. Approximately every 3-5 years, the filter can be expected to clog to the point that replacement of the top few inches of sand or, where employed, the layer of washed gravel and the top layer of filter cloth will be required.

7.2.7 Retention Basin (if present):

a. Definition: A retention basin is a storm water facility which includes a permanent impoundment, or pool of water, and, therefore, is normally wet, even during non-rainfall periods. Inflows from storm water runoff may be temporarily stored above this permanent pool.

b. Purpose: A retention basin provides for long-term water quality enhancement of storm water runoff. Storm water inflows may also be temporarily stored above the permanent pool for downstream flood control and channel erosion control. A retention basin is considered one of the most reliable and versatile BMPs available.

c. Water Quality Maintenance: High removal rates or particulate and soluble pollutants (nutrients) can be achieved in retention basins through *gravitational settling, biological uptake* and *decomposition.* When an even higher degree of pollutant removal efficiency is required, the basin can be ***enhanced*** by using various modifications relating to the size and design of the permanent pool.

d. Maintenance/Inspection Guidelines: The following maintenance and inspection guidelines are not intended to be all-inclusive. Specific facilities may require other measures not discussed here. The engineer is responsible for determining if any additional items are necessary.

- Vegetation: The basin's side slopes, embankment and emergency spillway should be mowed at least twice a year to discourage woody growth. Note that after the first growing season, it should be obvious if reinforcement seedings are needed. If they are, they should be installed at the onset of the second growing season after construction.

- Debris and Litter Removal: Debris and litter will accumulate near the inflow points and around the outlet control structure. Such materials should be removed periodically.

- Sediment Removal: Sediment deposition should be continually monitored in the basin. Removal of any accumulated sediment, in the sediment for forebay or elsewhere, is extremely important. Unless unusual conditions exist, accumulated sediment should be removed from the sediment forebay and possibly other deep areas within the permanent pool every 5 to 10 years.

- Inspections: A retention basin and its components should be inspected annually, at a minimum, to ensure that they operate in the manner originally intended. Items in need of repair should be addressed promptly and as specified in the comprehensive maintenance program. Detailed inspections by a qualified person(s) should address the following areas/concerns:
  - Damn settling, woody growth, and signs of piping
  - Signs of seepage on the downstream face of the embankment
  - Condition of grass cover on the embankment, basin floor and perimeter
  - Riprap displacement or failure
  - Principal and emergency spillway meets design plans for operation
  - Outlet controls, debris racks and mechanical and electrical equipment
  - Outlet channel conditions
  - Inlet pipe conditions
  - Safety features of the facility
  - Access for maintenance equipment
  - Sediment accumulation
  - Debris and trash accumulation
  - Erosion of the embankment or side slopes

8. MAINTENANCE

All BMPs indentified in the SWPPP must be maintained in effective operating condition. If site inspections indentify BMPs that are not operating effectively, maintenance must be performed before next anticipated storm event, or as necessary to maintain the continued effectiveness of storm water controls. If maintenance prior to the next anticipated storm event is impracticable, maintenance must be scheduled and accomplished as soon as practicable. In the case of

nonstructural BMPs, the effectiveness of the BMP must be maintained by appropriate means (e.g., spill response supplies available and personnel trained, etc.).

For an overview of required BMP maintenance, please refer to **Section 7** of this Environmental Plan. For detailed specifications and maintenance requirements, please refer to the Virginia Storm Water Management Handbook.

9. NON-STORM WATER DISCHARGES

In compliance with the in VA/NDPES General Permit Program for Storm Water Point Source Discharges Associated with Industrial Activity, owners of facilities with storm water discharges associated with industrial activity are authorized to discharge to surface waters within the boundaries of the Commonwealth of Virginia. All discharges are to be in accordance with the issued permit No. VA0002313.

9.1 Allowable Non-Storm Water Discharges. The following non-storm water discharges are authorized provided the non-storm water component of the discharge is in compliance with the state issued permit:

a. Discharges from fire fighting activities;

b. Fire hydrant flushings;

c. Potable water including water line flushings;

d. Uncontaminated air conditioning or compressor condensate;

e. Irrigation drainage;

f. Landscape watering provided all pesticides, herbicides, and fertilizer have been applied in accordance with manufacturer's instructions;

g. Routine external building wash down that does not use detergents ;

h. Pavement wash waters where no detergents are used and no spills or leaks of toxic or hazardous materials have occurred (unless all spilled material has been removed);

i. Uncontaminated ground water or spring water;

j. Foundation or footing drains where flows are not contaminated with process materials such as solvents; and

k. Incidental windblown mist from cooling towers that collects on rooftops or adjacent portions of the facility, but not intentional discharges from the cooling tower (e.g., "piped" cooling tower blow down or drains).

All other non-storm water discharges must be in compliance with the issued storm water general permit.

9.2 Unauthorized Discharges. Except in compliance with the storm water permit, or another permit issued by the board, it is unlawful to:

a. Discharge into state waters sewage, industrial wastes, other wastes, or any noxious or deleterious substances; or

b. Otherwise alter the physical, chemical or biological properties of such state waters and make them detrimental to the public health, or to animal or aquatic life, or to the use of such waters for domestic or industrial consumption, or for recreation, or for other uses.

9.3 Reports of Unauthorized Discharges. Any permittee who discharges or causes or allows a discharge of sewage, industrial waste, other wastes or any noxious or deleterious substance into or upon state waters in violation of 9.2; or who discharges or causes or allows a discharge that may reasonably be expected to enter state waters in violation of 9.2, shall notify the department of the discharge immediately upon discovery of the discharge, but in no case later than 24 hours after said discovery. A written report of the unauthorized discharge shall be submitted to the department within five days of discovery of the discharge. The written report shall contain:

a. A description of the nature and location of the discharge;

b. The cause of the discharge;

c. The date on which the discharge occurred;

d. The length of time that the discharge continued;

e. The volume of the discharge;

f. If the discharge is continuing, how long it is expected to continue;

g. If the discharge is continuing, what the expected total volume of the discharge will be; and;

h. Any steps planned or taken to reduce, eliminate and prevent a recurrence of the present discharge or any future discharges not authorized by this permit.

9.4 A Non-Storm Water Discharge Determination can be found in the Engineer's Certification found on page iv of this Environmental Plan.

10. COMPREHENSIVE SITE COMPLIANCE EVALUATION

10.1 One or more members of the Pollution Prevention Team are to perform an annual Comprehensive Site Compliance Inspection. The purpose of the inspection program is to:

a. confirm the accuracy of the description of potential pollution sources contained in the Plan,

b. determine the effectiveness of the Plan, and

c. assess compliance with the terms and conditions of the Virginia's NDPES General Permit Program for Storm Water Point Source Discharges Associated with Industrial Activity.

10.2 The inspection is performed annually using the checklist shown in tab titled **Inspection Forms.** Records of the inspections are retained with this E-Plan for at least three years. In the event that the inspection shows the Plan must be revised, such Plan revisions will be accomplished within two weeks after the inspection. Procedural and physical changes are implemented within twelve weeks of the inspection.

11. SPECIAL POLLUTION PREVENTION PLAN REQUIREMENTS

Items required by the Virginia Storm Water General Permit section have been incorporated within this Environmental Plan.

12. ADDITIONAL INFORMATION

SARA TITLE III SECTION 313 WATER PRIORITY CHEMICALS

A Section 313 Water Priority Chemical is defined in the general permit as 1) one which is listed on the Section 313 Toxic Chemical list in 40 CFR 372.65, 2) is present at the facility at or above applicable annual use thresholds and 3) meets any one of the following criteria:

- listed in Appendix D of 40 CFR 122 in either Table II, Table III, or Table V;
- listed as a hazardous substance in Section 311(b)(2)(A) of 40 CFR 116.4; or
- is a pollutant for which EPA has published acute or chronic water quality criteria.

The applicable annual usage thresholds are 25,000 lb/yr for chemicals manufactured or processed and 10,000 lb/yr for chemicals otherwise used in facility operations.
Chlorine is one of the chemicals estimated to be present at this Virginia Poultry Growers Cooperative Processing Plant in quantities at or above the Section 313 thresholds and that meets the above definition of a SARA Title III Section 313 Water Priority Chemical.

Ammonia is another Section 313 chemical that at the facility and is used as refrigerant in the facility's refrigeration system. The ammonia is confined within the refrigeration system components. Ammonia is a gas at standard temperature and pressure conditions, and therefore this material does not pose a significant risk for stormwater pollution under normal circumstances. However, accidental releases of ammonia form refrigeration systems could potentially impact stormwater runoff quality if water is used "knock down" ammonia vapors or if large volumes of liquid ammonia are released to certain outdoor areas.

Nitrate is also present at the facility within the biological treatment basins. Nitrate is a by-product to the biological reduction of ammonia. The effluent from the wastewater treatment system is tested and released in accordance with the facility treatment discharge permit. Nitrate is biological produced as part of a required reduction process and is considered a SARA Title III Section 313 Water Priority Chemical.

Storm Water Monitoring Plan

(SWMP)

VIRGINIA POULTRY GROWERS COOPERATIVE

HINTON PROCESSING PLANT

Street Address:
6349 Rawley Pike
Hinton, VA 22831
540-867-4028

STORM WATER MONITORING PLAN

The detailed monitoring requirements are specified within the Facilities Virginia General (VA/NDPES) Permit for Storm Water Point Sources Associated with Industrial Activity. This Storm Water Monitoring Plan is prepared to simplify the requirements and to present the procedures to facilitate site application.

All facilities covered by a Virginia Storm Water Permit are required to conduct twice a year Monitoring.

1. SAMPLING & MONITORING FREQUENCY

Semi-Annual Monitoring is to occur within the first and second half of each year.

1st Half	January through June
2nd Half	July through December

2. COLLECTION OF SAMPLE(S)

Collection of Samples for both Monitoring events:

2.1 A minimum one grab sample must be taken from each designated outfall twice a year.

2.2 All samples (except snowmelt samples) must be collected from the discharge resulting from a storm event that is greater than 0.1 inches in magnitude and that occurs at least 72 hours from the previously measurable (greater than 0.1 inch rainfall) storm event. The 72-hour storm interval is waived when the preceding measurable storm did not yield a measurable discharge, or if the facility is able to document that less than a 72-hour interval is representative for local storm events during the sampling period.

2.3 The grab sample must be taken during the first 30 minutes of the discharge. If it is not practicable to take the sample during the first 30 minutes, the sample may be taken during the first hour of discharge provided that the facility explains why a grab sample during the first 30 minutes was impracticable. This information must be documented on the appropriate monitoring form and maintained with the Storm Water Monitoring Plan.

2.4 If the sampled discharge co-mingles with process or non-process water, the facility must attempt to sample the storm water discharge before it mixes with the non-storm water.

2.5 All monitoring results shall be kept for six (6) years from the date the sample was taken.

3. QUARTERLY VISUAL MONITORING

4. BI-ANNUAL MONITORING

Monitoring of discharges associated with specific industrial activities.

4.1 The results of monitoring are primarily for use to determine the overall effectiveness of the SWPPP in controlling the discharge of pollutants to receiving waters. Values are not viewed as effluent limitations. While high value does not automatically indicate that violation of a water quality standard has occurred, it does signal that modifications to the SWPPP may be necessary.

Continued high values may identify facilities that would be more appropriately covered under an individual, or alternative general permit where more specific pollution prevention controls could be required.

Pollutants of Concern Food and Kindred Products (SIC 2015-2099)	Monitoring Cut-Off Concentration		Measurement Frequency
Flow	Report	mg/L	1/6 Months
Chemical Oxygen Demand	Report	mg/L	1/6 Months
Oil and Grease	Report	mg/L	1/6 Months
Total Suspended Solids	Report	mg/L	1/6 Months
pH	Report	mg/L	1/6 Months

4.2 Monitoring period is January 1 to December 31 each year of the permit. Monitoring must be performed twice a year, once in the first half and another in the second half.

5. REPORTING MONITORING RESULTS

5.1 Monitoring: For each outfall, one signed Discharge Monitoring Report (*forms provided by state*) form must be maintained on-site with the E-Plan for each storm event sampled. Monitoring results must be retained in accordance with part

5.2 Monitoring Information: Records of monitoring information shall include:

a. The date, exact place, and time of sampling or measurements;
b. The individual(s) who performed the sampling or measurements;
c. The date(s) and time(s) analyses were performed;
d. The individual(s) who performed the analyses;
e. The analytical techniques or methods used; and
f. The results of such analyses.

5.3 Facility Records:

The facility shall retain records of all monitoring information, including copies of all reports required by this permit, and records of all data used to complete the registration statement for this permit, for a period of at least three years from the date of the sample, measurement, report or request for coverage. This period of retention shall be extended automatically during the course of any unresolved litigation.

5.4 Rain Log:

Storm event data should be recorded on the Rain Log report (*forms found in the monitoring report section of the E-Plan*). Along with the monitoring results, the facility must provide the date and duration (in hours) of the storm event(s) sampled; rainfall measurements or estimates (in inches) of the storm event that generated the sampled runoff; the duration between the storm event sampled and the end of the previous measurable (greater than 0.1 inch rainfall) storm event; and an estimate of the total volume (in gallons) of the discharge sampled.

6. TYPICAL STEPS OF MONITORING

6.1 Check that the rain event is a proper sampling/monitoring event. All samples (except snowmelt samples) must be collected from the discharge resulting from a storm event that is greater than 0.1 inches in magnitude and that occurs at least 72 hours from the previously measurable (greater than 0.1 inch rainfall) storm event. The 72-hour storm interval is waived when the preceding measurable storm did not yield a measurable discharge, or if the facility is able to document that less than a 72-hour interval is representative for local storm events during the sampling period.

6.2 Walk and conduct visual examination of storm water as it flows towards each outfall.

6.3 Grab sample (two bottles) from each outfall during the first 30 minutes of the discharge. If it is not practicable to take the sample during the first 30 minutes, the sample may be taken during the first hour of discharge provided that the facility explains why a grab sample during the first 30 minutes was impracticable. This information must be documented on the appropriate monitoring form and maintained with the Storm Water Monitoring Plan.

6.4 When Monitoring is also being collected then the following also apply:

a. Fill out the label on the proper sample container. Samples collected for total phosphorus must be acidified when collected. Contact lab for proper container and safety precautions.
b. Pack sample(s) with ice in a cooler.
c. Complete the "Chain of Custody" form.
d. Within 24 hours transport and deliver the samples to an approved lab. Total Nitrogen requires analyses within 48 hours and the lab needs 24 hours, so it is imperative that the sample be at the lab within 24 hours.
e. Have lab sign the Chain of Custody form and retain copy for file.
f. Upon receipt of the lab results, record findings on the Monitoring report also referred to as the Discharge Monitoring Report (DMR).
g. File the chain of custody form and the Annual Monitoring report together with the E-Plan.

Spill Response & Cleanup Plan

(SR & CP)

VIRGINIA POULTRY GROWERS COOPERATIVE

HINTON PROCESSING PLANT

Street Address:
6349 Rawley Pike
Hinton, VA 22831
540-867-4028

SPILL RESPONSE & CLEANUP PLAN (SR&CP)

1. COUNTERMEASURES FOR DISCHARGE DISCOVERY AND RESPONSE

The following procedures shall be followed in the event of a fuel, oil or chemical spill:

a. The employee first noticing the spill will notify their immediate supervisor, who should then inform the **Facility Spill Response Coordinator.**

b. The first priority is to strive for containment of the spill within the containment area. If this cannot be done, attempts to contain spilled material on ground surface, within the drop inlets or drainage ditches of surface waterways on or offsite will be made using booms, dams, or other absorbents/barriers.

c. If is safe to do so, employees will plug or otherwise seal off leaking vessels or pipes if possible.

d. Employees will prevent the outbreak of fire by extinguishing all small fires, electrical sparks or smoking materials. They will disconnect all unnecessary electrical equipment in the vicinity of the spill, and bring available fire extinguishers to the spill area.

e. If spilled material enters a drop inlet, drainage ditch and/or waterway, booms, absorbent pads, socks, dams, or other barriers will be installed to contain fuel/oil/chemical in a limited area.

f. Absorbents or other recovery devices shall be used to recover/remove free product and/or sheen from storm water drainage structures, drainage ditch embankments, water surfaces, stream banks, etc.

g. Water hoses will not be used to flush fuel, oil, fat or chemical into drainage features, drop inlets, etc. unless directed by local, state and/or federal regulatory officials.

h. If spilled material enters a drainage ditch or waterway, chemicals will NOT BE used to disperse, emulsify or sink the fuel, chemical or oil, unless otherwise directed by local, state and/or federal regulatory officials. As described above, the first steps will be to contain the spilled material on the surface using booms or other barriers.

i. A member of the **Pollution Prevention Team** or designated representative shall perform applicable regulatory notifications and internal notifications as described in Section 5.

j. If a member of the **Pollution Prevention Team** determines outside assistance is necessary to properly contain or clean-up the spill then the designated Spill Response Contractor will be utilized.

k. The **Facility Spill Response Coordinator** shall document all spills on the Spill Event Documentation form included in the tab labeled **Spill Forms**. Original copies of these reports shall be included with this Plan.

l. Any waste materials generated in spill containment and clean-up activities will be properly disposed.

2. CLEANUP AND DISPOSAL OF RECOVERED MATERIALS

Contact the VA-DEQ and/or EPA Region III for assistance in disposing of the spilled material and any impacted soil, water, etc.

a. The following actions shall be followed for fuel/fat/chemical/oil spills.

- If spill containment and clean-up cannot be properly handled by facility personnel, contact clean-up contractor to respond to the Site and pump any liquids into a tank truck or barrels and dispose of in an approved manner.
- Any soils or water impacted shall also be excavated/recovered and sent offsite for proper disposal.
- Use suitable absorbents and detergents to remove material from pavement and dispose of waste materials at an approved landfill or other approved location.
- Excavate contaminated soils and dispose at an approved landfill. If dirt or other absorbent material is stored onsite, it should be stored on an impervious membrane and covered with a waterproof membrane. Contaminated material shall be sent offsite for proper treatment/disposal as soon as possible.

b. **DO NOT** burn spilled material or saturated adsorbents unless authorized by VA-DEQ and/or USEPA Region III.

c. Immediately after an emergency, the **Facility Spill Response Coordinator** shall verify that all released material is contained in the appropriate containers as required. All waste materials generated in spill containment and clean-up operations shall be sent off-site for proper treatment and disposal.

3. POST SPILL INVESTIGATION

Following a spill incident, the **Facility Spill Response Coordinator** shall take all responsible precautions to prevent recurrence. The following procedures shall be followed:

- Investigate the cause of the incident and submit a formal report to the **Facility Manager** as soon as practical.
- Ensure that proper decontamination, clean up and restoration actions are carried out as soon as possible (a record of all such actions performed should be maintained for future reference).
- Ensure that faulty or damaged fuel/oil/chemical handling or storage equipment is repaired or replaced and is re-certified, as necessary, prior to being placed back in service.
- Ensure that inadequate spill prevention and/or response procedures are updated and revised accordingly.
- Inform applicable employees of the sequence of events that led to the spill incident and discuss methods to prevent future occurrence.
- The Environmental Plan shall be reviewed, revised and recertified as necessary.
- If required, the **Facility Manager** shall issue written reports to applicable regulatory agencies on the spill event. Copies of written reports shall also be provided to the **Facility Spill Response Coordinator** and other applicable Virginia Poultry Growers Cooperative personnel.

4. SPILL EQUIPMENT & MAINTENANCE FOLLOWING A SPILL

After an emergency event, any emergency equipment used shall be cleaned so it will be fit for reuse and/or replaced as appropriate. The **Facility Spill Response Coordinator** and applicable maintenance and safety personnel shall inspect cleaned and/or replaced equipment and certify its fitness for its intended use. All essential emergency response equipment shall be made available for use as soon as possible after a spill incident.

Contact List and Emergency Phone Numbers (40 CFR 112.7.a.3.vi)

Rapid communication is extremely important since the National Response Center (NRC) and Virginia Department for Environmental Quality (VA-DEQ) must be notified immediately in the event of a spill. Immediately is usually defined as within 15 minutes of a person in responsible charge becoming aware of the spill.

Virginia Poultry Growers Cooperative	Name	Office	Cell
Facility Spill Response Coordinator	Woody Eppard	540-867-4205	540-478-3604
Safety Manager	Woody Eppard	540-867-4205	540-478-3604
Complex Manager	Mickey Baugher	540-867-4203	540-560-3742
Processing Plant Manager	Wes Hoover	540-867-4361	540-746-8775
Live Haul Manager	Ralph Pettit	540-867-4067	540-435-4061
Maintenance Manager	Roy Ruddle	540-867-4306	540-246-4216
Waste Water Operator	Eddie Raynes	540-867-4366	540-867-4105
Corporate Environmental Affairs Manager	Ron Harrison	540-896-4366	540-820-4698
Engineering Manager	Phil Miller	540-867-4028	540-578-1320

VA Department of Environment Quality
Normal working hours (540) 574-7800
After hours & holidays (800) 468-8892

Environmental Protection Agency Region 3
National Response Center (800) 424-8802

Spill Response Contractor, Holtzman Oil
Normal working hours (540)-477-3131

Spill Response Contractor, CURA Emergency
24 hours a day (800)-579-2872
Contact: Peter Okonski (972)-378-7336 office (214) 687-7346 cell

Fire & Rescue Squad 911
State Police 911
Municipal Police 911

City of Harrisonburg Emergency Response 911

5. REPORTING INFORMATION AND PROCEDURES

The **Facility Spill Response Coordinator** shall document all spills on the form included in the tab labeled Spill Forms. Original copies of these reports shall be included with this SPCC Plan.

Notification Guidelines

a. *If fuel, chemical or oil spill is less than 25 gallons*, the **Facility Spill Response Coordinator** shall contact the **Appropriate Manager**.

b. *If a gasoline fuel spill exceeds 25 gallons or a diesel fuel (or No.2 Fuel Oil) spill exceeds 75 gallons,* the **Facility Spill Response Coordinator**, with the assistance of the **Appropriate**, shall notify the **VA Department for Environmental Quality (VA-DEQ).**

c. *If a fuel/oil/chemical spill of any size discharges or threatens to discharge into a drainage ditch or waterway* the **Facility Spill Response Coordinator** with the assistance of the **Appropriate Manager**, shall notify the **National Response Center (NRC) and the VA Department for Environmental Quality (VA-DEQ).**

d. *If the discharge consists of 1,000 gallons or more of fuel, chemical or oil or if two reportable spill events have occurred at this Facility within the past 12 month period, which have impacted a waterway, then, within 60 days after a spill*, the **Appropriate Manager** or designated representative shall provide in writing the following information to the **USEPA (Region III)** with a copy to the **VA Department for Environmental Quality (VA-DEQ)**:

   - A complete copy of the SPCC Plan with any amendments;
   - The cause(s) of the spill(s);
   - The corrective actions taken to control the spill. Include a description of new, repaired, or replaced equipment;
   - Additional preventative measures taken to minimize the possibility of recurrence; and
   - Other applicable information.

e. *If a fuel/oil/chemical spill of any size could adversely impact the publicly owned wastewater collection and treatment systems*, the **Facility Spill Response Coordinator** with the assistance of the **Appropriate Manager**, shall notify **City of Harrisonburg**.

f. **The Manager** or the **Facility Spill Response Coordinator** shall also notify any other Virginia Poultry Growers Cooperative personnel that may need to be made aware of the spill incident.

Reporting Information (40 CFR 112.7.a.4)

Report the information listed below to the officials indicated previously. *NOTE THE TIME AND DATE THE INFORMATION WAS REPORTED AND THE NAME(S) OF THE REGULATORY AGENCY REPRESENTATIVE(S) THAT WAS CONTACTED* **(this information is to be documented on the forms found in the tab labeled spill forms)**.

- Company name (Virginia Poultry Growers Cooperative), location (6349 Rawley Pike, Hinton, Virginia 22831), your name, and phone number;
- Exact date, time and location of spill;
- Type and estimated quantity of spilled material;
- Source and cause of spill;
- Did the spill affect the water, air and / or soil;

- Name of body of water involved or likely to be involved;
- Any damages or injuries caused by the spill;
- Actions taken or aid needed for containment and cleanup;
- Is an evacuation necessary;
- Names of other individuals and / organizations that have been contacted; and,
- Other relevant information requested by applicable regulatory officials.

Spill Prevention, Control, and Counter Measures Plan
(SPCC)

VIRGINIA POULTRY GROWERS COOPERATIVE

HINTON PROCESSING PLANT

Street Address:
6349 Rawley Pike
Hinton, VA 22831
540-867-4028

SPILL PREVENTION, CONTROL & COUNTERMEASURE PLAN (SPCC)

1. PLAN CERTIFICATIONS

1.1 Professional Engineer's Certification (40 CFR 112.3(d))

Please refer to **Engineers' Certifications** found on page iv of this Environmental Plan.

2. FACILITY INFORMATION

2.1 Please refer to **SWPPP 1. Facility General Information** for facility information.

2.2 Adjacent Concerns: The site is served by public utilities. Stormwater is discharged in accordance with state issued permits. There are no known springs, state or federal wildlife management areas, nor historic landmarks within a close proximity of the complex property.

Table SPCC 1: Adjacent Natural Resources

Natural Resources	Description	Protection		Impact Potential
		Priority	Means	
Surface Waters	War Branch & Muddy Creek	High	secondary containment, stormwater collection or pretreatment through onsite wastewater treatment facility	Low
Groundwater	War Branch & Muddy Creek	High	secondary containment, stormwater collection or pretreatment through onsite wastewater treatment facility	Low
Public Water Supplies (surface water)	≈5 miles downstream	High	secondary containment, stormwater collection or pretreatment through onsite wastewater treatment facility	Low
State/Federal Wildlife Management Areas, Wildlife refuges, Management Areas, Sanctuaries	none	N/A	N/A	None
National Register of Historic Places	none	N/A	N/A	None
National Register of Natural Landmarks	none	N/A	N/A	None
Sanitary Sewer	None	N/A	N/A	None

2.3 Physical Layout of Facility (40 CFR 112.7.a.3)

See **SWPPP 3. Physical Site Description** of this Environmental (See Tab **MAPS**)

2.4 Oil and Fat Storage Description (40CFR 112.7.a.3i)

The facility has eleven (11) above ground storage tanks (ASTs) for the storage of fuel/oil/fat. These ASTs are located in outdoor areas at the Processing Plant. Information on these fuel and oil ASTs is provided in the table below. Various other non-SPCC regulated fluids are also used and stored onsite. These include various maintenance oils and fluids.

The following fuel/oil/fat products are used at the facility for the following purposes:

- Gasoline — Fueling vehicles and equipment
- Diesel Fuel — Fueling vehicles and equipment
- Kerosene — Fuel for portable heating units and other equipment
- Used Oil — Generated in equipment maintenance activities
- Mineral Oil — Used for lubricating/maintaining equipment
- Hydraulic Oil — Used in hydraulic system
- Sodium Hypochlorite — Used in sanitation processes

Table SPCC 2: AST Information (See Site Map in Tap labeled MAPS for location of tanks).

Tank Code	Material Stored	Location of AST	Volume (gallons)	Drainage Area	Potential Storm water Contact
C1	Sanitation Chemicals	Processing Plant	Varies	ICA-1	Low
C2	Sanitation Chemicals	Truck Wash	Varies	ICA-1	Low
C3	Sanitation Chemicals	Truck Wash	Varies	ICA-1	Low
C4	Sulfuric Acid	Wastewater Pretreatment	6,000	ICA-1	Low
C5	Aluminum Chloride	Wastewater Finial Treatment	6,000	ICA-1	Low
P1	Fuel Oil	Boiler Room	10,000	ICA-1	Moderate
P2	Kerosene	Boiler Room	275	ICA-1	Moderate
P3	Diesel Fuel	Truck Garage	10,000	ICA-1	Moderate
P4	Gasoline	Truck Garage	2,000	ICA-1	Moderate
P5	Diesel Fuel (off road)	Truck Garage	2,000	ICA-1	Moderate
P6	Motor Oil	Truck Garage	500	ICA-1	Low
P7	Frick Oil	Processing Plant	Varies	ICA-1	Low
P8	Hydraulic Oils	Truck Wash	275	ICA-1	Low
P9	Misc. Plant Oils	Wastewater Office	Varies	ICA-1	Low
W1	Waste Oil	Outside Refrigeration	300	ICA-1	Low
W1	Waste Oil	Outside Maintenance	300	ICA-1	Low
W1	Waste Oil	Wastewater	300	ICA-1	Low
W1	Waste Oil	Wastewater	300	ICA-1	Low
W2	Waste Oil	Truck Garage	2,000	ICA-1	Low
W3	Waste Oil	Truck Garage	275	ICA-1	Low
W4	Waste Oil	Truck Garage	1,500	ICA-1	Low

All ASTs are installed in secondary containment structures (or a building itself provides secondary containment) which are adequately sized to contain the volume of the largest AST in the secondary containment areas as well as allow sufficient freeboard for precipitation.

Both bottom and top fill design ASTs are installed at the Facility. Check Valves and/or other valving systems shall be provided on the bottom-fill design ASTs to prevent significant backflow of liquid content from the AST through the fill lines. The fill pipes for the ASTs located in outdoor areas are generally installed inside the secondary containment areas for containment of minor fuel/oil/chemical spillage during hose connecting/disconnecting operations. The AST's are provided with manual level gauging systems. Spill and overfill protection procedures for all of the regulated ASTs onsite are manual in nature. Specifically, the ASTs are gauged before filling and a fuel/lubricant/liquid-ingredient volume less than the void volume is ordered. The ASTs are also inspected during all filling operations.

2.5 Fuel & Oil Discharge Prevention Measures (40 CFR 112.7.a.3.ii)

The following procedures shall be followed to prevent discharges from occurring:

- Fuel, fat, chemicals and oil will be received only at designated locations.
- All fuel, fat, chemical and oil spills during receiving operations will be cleaned up as soon as possible. The collected material will be disposed in accordance with applicable regulatory requirements.
- All permanent fuel, fat, chemical and oil receiving and drain pipelines are equipped with valves, which are kept closed except when in active use.
- All fuel, fat, chemical or oil pipelines, which could drain a tank(s), are equipped with valves, which are kept closed except when in active use.
- All spill containment structures, pumps, pipelines, and fittings are maintained in good working order and free of leaks.
- Tanks are visually inspected for leaks and damage during all filling operations.
- Tanks shall be gauged before fuel/oil/fat is ordered. An amount less than the void volume in the tank shall be ordered. AST tank levels shall be visually inspected during all filling operations. **Delivery drivers shall be responsible for filling operations if their respective companies are made aware of this fact in writing; otherwise plant personnel shall oversee all tank filling and other fuel/oil/fat transfer operations.** *Copies of executed fuel/oil/fat/chemical vendor notification letters will be maintained on site.*
- Adequate lighting is provided, and shall be maintained, in the AST areas and vehicle fueling island area for security and nighttime operations.
- Transfer of fuel and oil to/from suppliers from/to Facility will be performed during daylight hours unless emergency conditions require night delivery. **Virginia Poultry Growers Cooperative personnel shall actively monitor all night fuel/oil/fat delivery operations.** Drivers of the fuel/oil/fat delivery truck shall inspect hose and hose connections for leaks throughout the transfer of product.
- Drivers, equipment operators, and/or mechanics shall remain with vehicles during all fueling and transfer operations. The operator shall also actively monitor fueling and transfer operations rather than sitting in cab or performing other functions.
- Driver/vehicle operators shall not continue to top off fuel tank after nozzle assembly has shut off due to high level/full condition.
- Vehicle drivers shall not use water to wash off any fuel/fat/oil spilled on vehicle saddle tanks or paved surfaces during fueling or transfer operations.

- Drip pans shall be used to contain spillage from hose connects and disconnects. Fluids accumulated in these drip pans shall be routinely removed and handled properly (i.e., disposed, reused, etc.).
- Fuel, fat, chemical and oil storage systems shall be adequately maintained and rapidly repaired to either API 653 or 570 standards when malfunctions, leaks or other failures occur. Damaged or faulty fuel, fat and oil handling and storage systems shall not be used until properly repaired.
- Waste and used fluids generated in vehicle and equipment maintenance activities shall be collected and routinely sent off-site for recycling or proper treatment and disposal.
- All ASTs and 55-gallon drums used to store Used Oil shall be clearly marked with the words "**USED OIL ONLY.**"
- Routine inventorying of fuel, oil, chemical and fat materials shall be performed to verify no significant loss of product due to theft, spillage, or other unusual conditions.

Critical equipment that is used in oil storage and transfer systems shall be maintained as described above with the following additional requirements:

- Equipment shall be inspected weekly with the inspection reports kept on file and available upon request.
- Oil transfer pumps shall be inspected annually and overhauled, as needed, each year by an outside oil handler contractor. If an inspection indicates leakage the oil transfer pumps will be overhauled by an outside oil handler contractor. All transfer equipment is to be checked and worn or damaged parts are to be replaced.
- Currently, there is no critical oil transfer equipment at this facility.

Table SPCC 3: Critical Equipment

Code	Inspection Frequency	Formal Testing	Pump Pressures (psi)	
			Intake	Discharge
P1	Weekly		2	50
P3-P5	Weekly		2	0

Inspection of equipment and systems are conducted weekly thus eliminating the need for formal testing.

2.6 Discharge or Drainage Controls (40 CFR 112.7.a.3.iii)

The following controls are in place to prevent or control a discharge:

- All bulk tanks are within secondary containment structures adequately sized to contain at least 110% of the volume of the largest AST in the containment area.
- Tanks (P1, W1) are double walled tanks complete with roof and the ability to monitor the insitutial space.
- Tank (P2) is located within containment with a lockable drain valve.
- Tanks (P3, P4, P5) are located within containment complete with a sump where collected rainwater can be removed and transferred to the wastewater treatment system.
- Tanks (P6, P7, P8, P9, W3, W4, C1, C2, C3, C4, C5) are located within building structures capable of providing containment.

- Where applicable, the secondary containment areas are equipped with a drain line and lockable valve to allow the removal of any rainwater that may accumulate in the secondary containment areas. The drain line will be used only to discharge accumulated rainwater from the structure. During draining, the authorized persons will remain at the drain and ensure no oil, fuel, chemicals or other hazardous substances are released. A record shall be kept if rainwater from a secondary containment area is drained to stormwater collection. **See Tab labeled Monitoring Forms.**
- Valves on containment area drain lines shall be kept closed and locked except when drain line is in active use.
- Significant quantities *(i.e., quantities of fuel or chemicals which may cause blockages in sewer lines, explosion or fire hazards, upset wastewater treatment systems, or other adverse conditions)* of oil or chemical materials collected in the secondary containment area shall not be discharged through the secondary containment area drain valve to on-site wastewater treatment or to the local POTW.
- At a minimum, the spill response equipment **shall be maintained onsite.**

2.7 Countermeasures for Discharge Discovery, Response and Cleanup (40 CFR 112.7.a.3.iv)

See Spill Response & Cleanup Plan included in this Environmental Plan

2.8 Prediction of Discharge Characteristics (40 CFR 112.7.b)

Brief descriptions of the flow directions for a fuel, oil or fat spill, and the outfalls potentially impacted, are listed below. Potential impacts to storm water drainage systems assume secondary containment and spill containment systems and measures fail to properly contain spilled fuel/oil/fat material.

Unless a very large fuel/oil/fat spill happened to occur at the Site during a significant rain event, significant off-site impacts would not reasonably be expected. Storm water collection systems onsite could potentially be impacted from a fuel/oil/fat spill.

Potential Spill Volume and Rates: Sanitation Chemicals (C1)

Potential Event	Direction of Flow	Spill Rate	Total Quantity (gallons)
Complete failure of tank	Tank located within building.	Instantaneous	Varies
Partial failure of tank		Gradual to Instantaneous	1 to Varies
Tank overfill		1 to Several GPM	0
Pipe failure		1 to Several GPM	0
Leaking pipe or valve		1 to Several GPM	0
Leak during truck unloading		1 to Several GPM	0

Potential Spill Volume and Rates: Sanitation Chemicals (C2)

Potential Event	Direction of Flow	Spill Rate	Total Quantity (gallons)
Complete failure of tank	Tank located within building.	Instantaneous	Varies
Partial failure of tank		Gradual to Instantaneous	1 to Varies
Tank overfill		1 to Several GPM	0
Pipe failure		1 to Several GPM	0
Leaking pipe or valve		1 to Several GPM	0
Leak during truck unloading		1 to Several GPM	0

Potential Spill Volume and Rates: Sanitation Chemicals (C3)

Potential Event	Direction of Flow	Spill Rate	Total Quantity (gallons)
Complete failure of tank	Tank located within building.	Instantaneous	Varies
Partial failure of tank		Gradual to Instantaneous	1 to Varies
Tank overfill		1 to Several GPM	0
Pipe failure		1 to Several GPM	0
Leaking pipe or valve		1 to Several GPM	0
Leak during truck unloading		1 to Several GPM	0

Potential Spill Volume and Rates: 6,000-gallon AST Sulfuric Acid (C4)

Potential Event	Direction of Flow	Spill Rate	Total Quantity (gallons)
Complete failure of tank	Secondary containment is within building.	Instantaneous	6,000
Partial failure of tank		Gradual to Instantaneous	1 to 6,000
Tank overfill		1 to Several GPM	1 to 10
Pipe failure		1 to Several GPM	1 to 10
Leaking pipe or valve		1 to Several GPM	1 to 10
Leak during truck unloading		1 to Several GPM	1 to 10

Potential Spill Volume and Rates: 6,000-gallon AST Aluminum Chloride Tank (C5)

Potential Event	Direction of Flow	Spill Rate	Total Quantity (gallons)
Complete failure of tank	Secondary containment is within building.	Instantaneous	6,000
Partial failure of tank		Gradual to Instantaneous	1 to 6,000
Tank overfill		1 to Several GPM	1 to 10
Pipe failure		1 to Several GPM	1 to 10
Leaking pipe or valve		1 to Several GPM	1 to 10
Leak during truck unloading		1 to Several GPM	1 to 10

Potential Spill Volume and Rates: 10,000-gallon AST Fuel Oil Tank (P1)

Potential Event	Direction of Flow	Spill Rate	Total Quantity (gallons)
Complete failure of tank	Tank events flow into ditch leading South West to outfall 002.	Instantaneous	10,000
Partial failure of tank		Gradual to Instantaneous	1 to 10,000
Tank overfill		1 to Several GPM	1 to 10
Pipe failure		1 to Several GPM	1 to 10
Leaking pipe or valve		1 to Several GPM	1 to 10
Leak during truck unloading		1 to Several GPM	1 to 10

Potential Spill Volume and Rates: 275-gallon AST Kerosene Tank (P2)

Potential Event	Direction of Flow	Spill Rate	Total Quantity (gallons)
Complete failure of tank	Tank event flow into secondary containment. Containment, flow towards stormwater pump station	Instantaneous	275
Partial failure of tank		Gradual to Instantaneous	1 to 275
Tank overfill		1 to Several GPM	1 to 10
Pipe failure		1 to Several GPM	1 to 10
Leaking pipe or valve		1 to Several GPM	1 to 10
Leak during truck unloading		1 to Several GPM	1 to 10

Potential Spill Volume and Rates: 10,000-gallon AST Diesel Fuel Tank (P3)

Potential Event	Direction of Flow	Spill Rate	Total Quantity (gallons)
Complete failure of tank	Tank event flow into secondary containment. Containment, flow towards stormwater pump station	Instantaneous	10,000
Partial failure of tank		Gradual to Instantaneous	1 to 10,000
Tank overfill		1 to Several GPM	1 to 10
Pipe failure		1 to Several GPM	1 to 10
Leaking pipe or valve		1 to Several GPM	1 to 10
Leak during truck unloading		1 to Several GPM	1 to 10

Potential Spill Volume and Rates: 2,000-gallon AST Gasoline Tank (P4)

Potential Event	Direction of Flow	Spill Rate	Total Quantity (gallons)
Complete failure of tank	Tank events flow into secondary containment, towards stormwater pump station.	Instantaneous	2,000
Partial failure of tank		Gradual to Instantaneous	1 to 2,000
Tank overfill		1 to Several GPM	1 to 10
Pipe failure		1 to Several GPM	1 to 10
Leaking pipe or valve		1 to Several GPM	1 to 10
Leak during truck unloading		1 to Several GPM	1 to 10

Potential Spill Volume and Rates: 2,000-gallon AST Off Road Diesel Fuel Tank (P5)

Potential Event	Direction of Flow	Spill Rate	Total Quantity (gallons)
Complete failure of tank	Tank event flow into secondary containment. Containment, flow towards stormwater pump station	Instantaneous	2,000
Partial failure of tank		Gradual to Instantaneous	1 to 2,000
Tank overfill		1 to Several GPM	1 to 100
Pipe failure		1 to Several GPM	1 to 50
Leaking pipe or valve		1 to Several GPM	1 to 500
Leak during truck unloading		1 to Several GPM	1 to 25

Potential Spill Volume and Rates: 500-gallon AST Motor Oil Tank (P6)

Potential Event	Direction of Flow	Spill Rate	Total Quantity (gallons)
Complete failure of tank	Tank located within building.	Instantaneous	500
Partial failure of tank		Gradual to Instantaneous	1 to 500
Tank overfill		1 to Several GPM	1 to 50
Pipe failure		1 to Several GPM	1 to 20
Leaking pipe or valve		1 to Several GPM	1 to 20
Leak during truck unloading		1 to Several GPM	1 to 20

Potential Spill Volume and Rates: Misc.-gallon AST Frick Oil Tank (P7)

Potential Event	Direction of Flow	Spill Rate	Total Quantity (gallons)
Complete failure of tank	Tank located within building.	Instantaneous	Varies
Partial failure of tank		Gradual to Instantaneous	1 to Varies
Tank overfill		1 to Several GPM	1 to 50
Pipe failure		1 to Several GPM	1 to 20
Leaking pipe or valve		1 to Several GPM	1 to 20
Leak during truck unloading		1 to Several GPM	1 to 20

Potential Spill Volume and Rates: Misc.-gallon AST Hydraulic Oil Tank (P8)

Potential Event	Direction of Flow	Spill Rate	Total Quantity (gallons)
Complete failure of tank	Tank located within building.	Instantaneous	275
Partial failure of tank		Gradual to Instantaneous	1 to 275
Tank overfill		1 to Several GPM	1 to 50
Pipe failure		1 to Several GPM	1 to 20
Leaking pipe or valve		1 to Several GPM	1 to 20
Leak during truck unloading		1 to Several GPM	1 to 20

Potential Spill Volume and Rates: Misc.-Plant Oils (P9)

Potential Event	Direction of Flow	Spill Rate	Total Quantity (gallons)
Complete failure of tank	Tank located within building.	Instantaneous	Varies
Partial failure of tank		Gradual to Instantaneous	1 to Varies
Tank overfill		1 to Several GPM	1 to 50
Pipe failure		1 to Several GPM	1 to 20
Leaking pipe or valve		1 to Several GPM	1 to 20
Leak during truck unloading		1 to Several GPM	1 to 20

Potential Spill Volume and Rates: 300-gallon AST Waste Oil Tank (W1x 4)

Potential Event	Direction of Flow	Spill Rate	Total Quantity (gallons)
Complete failure of tank	Tank event flow into secondary containment. Containment, flow within ICA-1 or ICA-2	Instantaneous	300
Partial failure of tank		Gradual to Instantaneous	1 to 300
Tank overfill		1 to Several GPM	1 to 10
Pipe failure		1 to Several GPM	1 to 10
Leaking pipe or valve		1 to Several GPM	1 to 10
Leak during truck unloading		1 to Several GPM	1 to 10

Potential Spill Volume and Rates: 2,000-gallon UST Waste Oil Tank (W2)

Potential Event	Direction of Flow	Spill Rate	Total Quantity (gallons)
Complete failure of tank	UST overflow towards stormwater pump station	Instantaneous	2,000
Partial failure of tank		Gradual to Instantaneous	1 to 2,000
Tank overfill		1 to Several GPM	1 to 100
Pipe failure		1 to Several GPM	1 to 50
Leaking pipe or valve		1 to Several GPM	1 to 50
Leak during truck unloading		1 to Several GPM	1 to 25

Potential Spill Volume and Rates: 275-gallon AST Waste Oil Tank (W3)

Potential Event	Direction of Flow	Spill Rate	Total Quantity (gallons)
Complete failure of tank	Tank located within building.	Instantaneous	275
Partial failure of tank		Gradual to Instantaneous	1 to 275
Tank overfill		1 to Several GPM	1 to 50
Pipe failure		1 to Several GPM	1 to 20
Leaking pipe or valve		1 to Several GPM	1 to 20
Leak during truck unloading		1 to Several GPM	1 to 20

Potential Spill Volume and Rates: 1,500-gallon UST Oil Water Separator (W4)

Potential Event	Direction of Flow	Spill Rate	Total Quantity (gallons)
Complete failure of tank	Tank event flow into secondary containment. Containment, flow towards stormwater pump station	Instantaneous	1,500
Partial failure of tank		Gradual to Instantaneous	1 to 1,500
Tank overfill		1 to Several GPM	1 to 50
Pipe failure		1 to Several GPM	1 to 20
Leaking pipe or valve		1 to Several GPM	1 to 20
Leak during truck unloading		1 to Several GPM	1 to 20

2.9 Containment and Other Diversionary Structures (40 CFR 112.7.c)

The above containers are provided with appropriate containment and/or diversionary structures to prevent a discharge as described above. Containment structures are capable of containing oil and are designed so that any discharge from the primary container cannot escape the containment system prior to cleanup.

Company policy is that all containers are to be stored in a containment area, except empty containers awaiting transport. Empty containers must be stored with the bungs attached.

Spills from containers that are not located in containment structures will be prevented from discharging the property through the use of curbing, culverts, other drainage systems, booms and/or absorbent materials.

2.10 Inspection, Tests & Records (40 CFR 112.7.e)

See the **Storm Water Monitoring Plan**, included in this Environmental Plan

2.11 Training (40 CFR 112.7.f)

Annual Staff Training (40 CFR 112.7.f.1 and 3)

All applicable Virginia Poultry Growers Cooperative maintenance and operating personnel will be instructed with regard to the purpose and proper operation of all ASTs, valves, pumps and other devices associated with receiving, storage and dispensing systems for fuel, fat and oil materials. The **Manager or his designee** is responsible for providing applicable training to Facility personnel. Training topics shall include:

- Operation and maintenance of equipment to prevent discharges;
- Fuel, fat and oil receiving operations and equipment/vehicle fueling operations;
- Spill prevention systems and procedures;
- Spill response and containment procedures;
- Applicable pollution control laws, rules and regulations;
- General facility operations;
- The contents of this SPCC plan;
- Any known discharges from the facility;
- Any known equipment malfunctions or failures;

- Any recently developed precautionary measures;
- Fire suppression procedures; and,
- Other applicable topics.

The required training for the SPCC Plan has been combined with the required training for the SWP3. A sample training form is **located at the Tab labeled TRAINING LOG FORM.**

2.12 Personnel Accountable for Discharge Prevention (40 CFR 112.7.f.2)

- Complex Manager
- Maintenance Manager
- Safety Manager
- **Facility Spill Response Coordinator**
- Processing Plant Manager
- Truck Shop Manager
- Live Production Manager
- Corporate Environmental Affairs Manager

Refer to **SWPPP Section 2 in this Environmental Plan** for names associated with the titles.

2.13 Vendor Notification & Training

Once vendors have been notified in writing (See **Tab: VENDOR LETTER),** the General Manager of the Site requests that delivery drivers be responsible for filling operations. Then the following training is to be conducted. Fuel and Oil Suppliers' personnel and Used Oil Management for Virginia Poultry Growers Cooperative personnel shall be instructed with regard to the following:

- The operation of valves and end caps on tank fill lines;
- Tank level gauging systems and procedures, tank high-level alarm systems, and spill/overfill systems and procedures;
- Checking the ullage (void space) in the AST versus the amount of fuel or oil they intend to pump into it prior to initiation of filling operations;
- Drivers being present at the tank site and actively monitoring AST filling or and Used Oil AST draining operations;
- Responsibility for spills that result from their actions during AST filling or Used Oil AST draining operations;
- Filling of fuel and oil ASTs only during daylight hours, unless an emergency requires a nighttime delivery. Notification that Facility Personnel must be present to monitor all nighttime AST filling operations.

Fuel/oil vendors may be sent a notification letter informing them of their responsibilities. Copies of executed fuel/oil vendor notification letters will be maintained in **Tab: VENDOR LETTER** of this plan.

2.14 Security (40 CFR 112.7.g)

The facility operates 24 hours per day from Sunday evening to Friday evening, and facility personnel are present onsite to monitor fuel, oil and fat storage and handling systems during these periods. The developed portion of the site, including processing areas, fuel, oil and fat storage systems are enclosed within chain link fencing to deter vandalism and entry by unauthorized persons. The fuel dispensers are provided with a security system to provide operation by authorized personnel only.

There is adequate lighting in areas where the fuel, oil and fat ASTs are located as well as in the associated product receiving areas for nighttime detection of leaks and spills as well as to deter vandalism. The vehicle-fueling island is also provided with adequate lighting for nighttime detection of leaks and spills as well as to deter operation by unauthorized personnel. Fuels and oils are generally only received at the facility during daylight hours. Vehicle fueling occurs at the facility during all hours of the day.

2.15 Facility Tank car & Tank Truck Loading/Unloading Rack (40 CFR 112.7.h)

This facility does not have a loading or unloading rack.

2.16 Field Constructed Tanks (40 CFR 112.7.i)

No field constructed tanks have been repaired; altered, reconstructed or undergone a change in service, therefore a brittle fracture test is not required. If a field constructed tank is repaired, altered, reconstructed, undergoes a change in service or discharges oil or fails due to brittle fracture failure or other catastrophe the container will be evaluated for risk of discharge and appropriate action will be taken.

3. SPCC REQUIREMENTS (40 CFR112.8 AND 112.12)

40 CFR 112.8 covers petroleum oils and non-petroleum oils, except oils and grease, and fish and marine mammal oils; and vegetable oils. 40 CFR 112.12 covers oils and grease, and fish and marine mammal oils; and vegetable oils. The requirements for both sections are identical. For clarity and ease of use by field personnel the requirements for both sections are discussed together in this SPCC Plan under the appropriate 40 CFR 112.8 section.

3.1 Facility Drainage (40 CFR 112.8.b)

See Section 3, of the Storm Water Pollution Prevention Plan, included in this Environmental Plan.

3.2 Bulk Storage Containers (40 CFR 112.8.c)

3.2.1 Tank Compatibility With its Contents (40 CFR 112.8.c.1)
Bulk storage containers may be constructed on stainless steel, carbon steel, polyethylene and/ or other plastics. Prior to use the compatibility of the tank material with the material to be stored is verified.

3.2.2 Diked Area Construction & Containment Volume (40 CFR 112.8.c.2)
The secondary containment structures meet volume requirements. The containment exceeds the capacity of the largest tank plus room for storm water. Containment materials are sufficiently impervious to contain the contents of the tank.

3.2.3 Diked Area, Inspection & Drainage of Rainwater (40 CFR 112.8.c.3)
Where applicable, the diked areas are equipped with a drain line and lockable valve to allow the removal of any rainwater that may accumulate in the secondary containment areas. The drain line will be used only to discharge accumulated rainwater from the structure. Where drainpipes are not present the diked storage area can be drained by the use of a manually activated pump. During draining, the authorized persons will remain at the drain and ensure no oil, fuel, fat or other hazardous substances are released. A record shall be kept if rainwater from a secondary containment area is drained to storm water outfalls. **See Tab "Inspection Forms" for Containment Drainage Inspection Report.**

3.2.4 Corrosion Protection of Completely Buried Metallic Storage Tanks (40 CFR 112.8.c.4)
This section does not apply to this facility does not have installed UST's.

3.2.5 Corrosion Protection of Partially Buried Metallic Storage Tanks (40 CFR 112.8.c.5)
This section does not apply to this facility. There are no partially buried metallic storage tanks.

3.2.6 Aboveground Tank Periodic Integrity Monitoring (40 CFR 112.8.c.6)
The outside of the tanks are frequently observed by operating personnel for signs of deterioration, leaks, or accumulation of oil inside the secondary containment. Routine visual inspections are logged on **Weekly Facility AST Checklist form found in Tab Inspection Forms.**

3.2.7 Control of Leakage Through Internal Heating Coils (40 CFR 112.8.c.7)
Any leakage from an internal heating coil would be drained to the spill containment structure. No discharge would occur.

3.2.8 Fail-Safe Engineered Tanks (40 CFR 112.8.c.8)
Personnel are present when bulk containers are being filled. Any overfill would be immediately noticed by the operator or delivery person and response action would be implemented.

3.2.9 Site Effluent Discharge Inspections (40 CFR 112.8.c.9)
Treated wastewater/storm water is inspected according to the terms specified within the facilities Virginia General Permit: VA0002313.

3.2.10 Correction of Visible Oil Leaks (40 CFR 112.8.c.10)
Visible oil leaks are repaired promptly.

3.2.11 Position of Mobile or Portable Oil Storage Tanks (40 CFR 112.8.c.11)
If mobile or portable oil storage tanks are on site they are to be provided with secondary containment sufficiently sized to contain the contents of the tank with sufficient freeboard for precipitation. There are currently no mobile or portable oil storage tanks on the property.

3.3 Facility Transfer Operations, Pumping & Facility Process (40 CFR 112.8.d)

3.3.1 Buried Piping Installation Protection (40 CFR 112.8.d.1)
Any buried piping that is installed or replaced on or after August 16, 2002 must be provided with a protective wrapping and coating. This piping must also be cathodically protected or otherwise meet the corrosion protection standards of 40 CFR 280 or an equivalent State program. If any buried piping is exposed for any reason, Virginia Poultry Growers Cooperative personnel will carefully inspect it for deterioration. If corrosion damage is found, appropriate corrective action will be taken.

3.3.2 Not in Service & Standby Service (40 CFR 112.8.d.2)
Pipelines that contain petroleum products/oil or fat that are not in service will be capped or blank-flanged at the terminal connection and marked.

3.3.3 Pipe Support Design (40 CFR 112.8.d.3)
Pipe supports are properly designed to minimize abrasion and corrosion and allow for expansion and contraction.

3.3.4 Valve & Pipeline Examination (40 CFR 112.8.d.4)
The general condition of all aboveground valves and piping are visually examined regularly to insure the integrity of the system. **These inspections are logged on Inspection form called Weekly Facility AST Inspection Checklist found at Tab "Inspection Forms".** Records are kept on site for 3 years.

3.3.5 Aboveground Piping Protection from Vehicular Traffic (40 CFR 112.8.d.5)
There is no exposure of aboveground piping to vehicular traffic.

4. ONSHORE OIL PRODUCTION FACILITIES

Sections 40 CFR 112.9, 112.10, 112.11, 112.13, 112.14 and 112.15 are not applicable to this facility.

5. PROCEDURES FOR FIRES OR OTHER CATASTROPHIC OCCURRENCES

Emergency response to contain a fire is essential. The use of water and chemical fire suppressants could generate contaminated run-off and spread the fire. In the event of a major release of product from the facility, implement the following procedures:

- All unnecessary employees shall be evacuated from impacted areas, buildings, etc.
- In the event of a small, localized fire, an employee in the immediate area will report the fire to the immediate supervisor and attempt to extinguish it if so directed and safe to do so.
- If the employee is unable to readily extinguish the fire, then:
    - Contact local fire and police officials for assistance.
        - Fire: 911
        - Police: 911

- Contact Plant Manager

Contact the National Response Center (NRC), the Virginia Department for Natural Resources (KDNR) if fuel/oil/fat material has or is likely to impact a drainage ditch or waterway or if toxic air emissions are possible due to the fire.

6. APPLICABILITY OF SUBSTANTIAL HARM CRITERIA

In accordance with 40 CFR 112.20, for all facilities regulated under the Oil Pollution Prevention Regulation (40 CFR 112), an initial screening has been performed to determine if a Facility Response Plan is required. The Facility Response Plan is required for certain facilities that transfer oil over water or have the capacity to store over 1 million gallons of oil. This facility does not meet the criteria for substantial harm.

GroundWater Monitoring Plan
(GWMP)

VIRGINIA POULTRY GROWERS COOPERATIVE

HINTON
PROCESSING PLANT

Street Address:
6349 Rawley Pike
Hinton, VA 22831
540-867-4028

GROUNDWATER PROTECTION PLAN (GWPP)

Virginia Poultry Growers Cooperative implements groundwater protection by managing, practices, process, activities and procedures associated with the handling storage and use of materials having potential to contaminate either surface or ground waters.

1. **Inventory of Potential Sources**: Process and personnel activities, chemical storage areas or structures, stormwater collection and wastewater collection systems that have the potential to impact the quality of the local water table have been identified and are indicated on the drawing found in the MAP section of the "Environmental Plan". Additional information related to potential sources can be found in the following location within the "Environmental Plan":
    - SWPPP, Table 4.1, "Potential Sources of Storm Water Pollution"
    - SWPPP, Section 4.3 Inventory of Exposed Materials
    - SPCC, Table 2, "AST Information"

2. **Ground Water Protection Procedures**: To reduce the potential of pollutants entering the ground water, Virginia Poultry Growers Cooperative has implemented several company procedures to insure risk factors are minimal.

2.1 All bulk storage of petroleum, fats/grease, and chemical are to be within a secondary containment structure capable of containing the volume of the largest tank plus and additional twenty percent (20%).

2.2 All containment structures are to receive scheduled inspections.

2.3 All process piping is to be above grade, with the exception of stormwater and wastewater.

2.4 All facility trash is placed in contracted dumpsters and receives scheduled pick-up.

2.5 All scrap metal is placed in a designated "metals only" dumpster with scheduled removal.

2.6 All unused or surplus equipment stored outdoors is to be fully washed with all oils removed, prior to placement in the "surplus equipment temporary storage area (A6)".

2.7 Equipment stored in the bone yard is removed based on quantity and scrap metal prices, but is not to remain for more than two years.

2.8 All drums and totes whether stored indoors or outdoors is required to have the bung installed. Suppliers of the product are required to remove empty containers on a regular basis.

2.9 All spills are documented and spill clean-up procedures are implemented for each spill event.

2.10 All pump stations, manholes structures are to be inspected for water tightness. Visual inspections during flow and non-flow conditions are to be used to evaluate water tightness.

2.11 Stormwater and or wastewater piping is to be visually inspected to evaluate water tightness.

2.12 If collection system structures or piping were found to be compromised, actions appropriate to correct the issue shall be taken in a timely manner.

Site Specific Items (Hinton Processing Plant)

2.13 The active surface areas around the processing plants are paved with either concrete or asphalt to provide traffic stability, aid in stormwater collection and to minimize groundwater infiltration.

2.14 All collected stormwater is transferred into the wastewater treatment system for the reduction of pollutants prior to discharge in accordance with the permit requirements.

3. **New Facilities**: Prior to any major construction project, the design engineer is to be instructed to consider the impact to geotechnical features such as karts, wetlands, faults, subsidence, delineated wellheads protection areas, etc. The Ground Water Protection Plan will need to be revised to reflect the new construction.

4. **Current Regulated Activities**:

- Commercial or industrial storing or related handling in bulk quantities of raw materials, intermediate substances or products, finished products, substances held for recycling, or other pollutants held in tanks, drums or other containers or piles.
- Transmission in pipelines of raw materials, finished products or other pollutants.
- Storing or related handling of road oil, dust suppressants or de-icing agents at a central location.
- Application or related handling of road oils, dust suppressants or de-icing materials.
- Collection or disposal of pollutants in an industrial or commercial facility through the use of floor drains that are not connected to on-site sewage disposal systems, closed-loop collection or recovery systems, or a waste treatment system permitted under the National Pollution Discharge Elimination System.
- Impoundment or containment of pollutants in surface impoundments, lagoons, pits or ditches.
- Commercial or industrial transfer, including loading and unloading, in bulk quantities of raw materials, intermediate substances or products, finished products, substances held for recycling or other pollutants.

5. **Ground Water Quality**: The current ground water quality is not specifically documented. Past excavation of construction projects have exposed the ground water table, however in all cases there has been no evidence that the ground water is or has been contaminated. If indicators are present in future project, samples will be collected and analyzed for pollutants generally found on the site.

6. **Fill Material and Deicing**: Industrial waste materials generated at the facility will not be used for fill, deicing or any other use, unless that use is allowed under a state regulation or permit.

7. **Employee Training**: Training will be conducted as required by either state regulations of permits. For additional training information refer to section titles TRAINING, log, forms & guides of the sites "Environmental Plan".

8. **Weekly Inspection**: The facility is inspected as detailed in the SWPPP, SWMP, SR&CP and the SPCC plans.

This Ground Water Protection Plan must be available on site at all times for review by DEQ personnel.

Maps

VIRGINIA POULTRY GROWERS COOPERATIVE

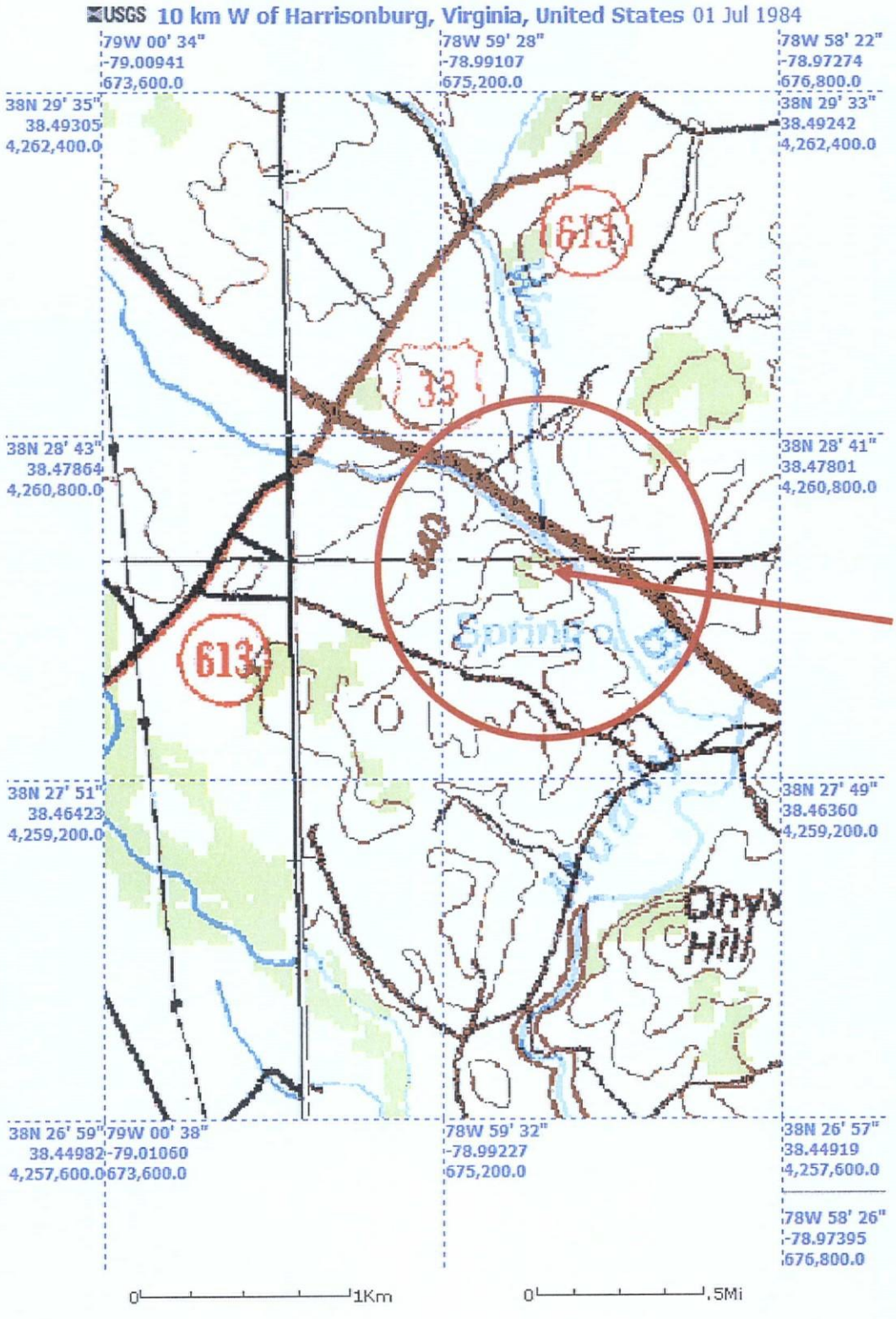
HINTON PROCESSING PLANT

Street Address:
6349 Rawley Pike
Hinton, VA 22831
540-867-4028

Location Map

6349 Rawley Pike
Hinton, VA 22831

1 Mile Radius USGS Map



Carver, Beverley (DEQ)

From: Rick Blackwell [rick@blackwellengineering.com]
Sent: Monday, June 02, 2014 9:19 AM
To: Carver, Beverley (DEQ)
Subject: Re: VPGC, LLC - Hinton - Map Environmental Plan submittal
Attachments: VGVA01-05 05 VPGC-HINTON spill plan-SITE.pdf

Bev, this is Dawn, please let me know if this works for you. Have a great day :)

Rick Blackwell
Senior Environmental Engineer

Blackwell Engineering
566 East Market Street
Harrisonburg, VA 22801
540-432-9555 (Office)
540-434-7604 (Fax)
www.blackwellengineering.com

This email was added separately to filenet. The map is attached to the email

On 5/30/2014 2:48 PM, Carver, Beverley (DEQ) wrote:

> Hi Rick,
>
> Ron Harrison delivered the permit reissuance application for the Hinton plant. The Environmental Plan contained a large map which we are unable to scan for the file. Can you email an electronic version of the map?
>
> Thanks,
>
> Bev
>
> Beverley W. Carver
> Water Permit Writer Senior
> Department of Environmental Quality
> Valley Regional Office
> 4411 Early Road, Harrisonburg, VA
> Phone: (540) 574-7805 FAX: (540)574-7878
> email: Beverley.Carver@deq.virginia.gov
> web: www.deq.virginia.gov
> Mail: P.O. Box 3000, Harrisonburg, VA 22801

Inspection Forms

VIRGINIA POULTRY GROWERS COOPERATIVE

HINTON PROCESSING PLANT

Street Address:
6349 Rawley Pike
Hinton, VA 22831
540-867-4028

Monthly Facility AST Inspection Checklist

This record is for the monthly inspections conducted at the facility. Place an X in the appropriate box for each item. If any responses require elaboration, do so in the Descriptions/Comments space provided. Further descriptions or comments should be attached on a separate sheet of paper, if necessary.

AST Inspections	P1		P2		P3		P4		P5		P6		P7		P8	
	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N
STORAGE TANK																
Tank leaking?																
Tank rusting?																
Evidence of tank overfill?																
Debris around tank?																
Tank gages not operating?																
CONTAINMENT																
Containment leaking?																
Containment is damaged?																
Drain clogged/obstructed?																
Drain valve open?																
Drain valve unlocked?																
Debris in containment area?																
PIPES or HOSES																
Pipes damaged?																
Pipes deteriorating?																
STORM WATER CONVEYANCE																
Is there evidence of non-stormwater in the down channel conveyance system?																
Does the down channel conveyance system contain debris?																
Is there evidence of pollutants in the channel conveyance system (e.g. stressed or dead vegetation, colored water, pungent odor?																

Description/Comments to include all ICA areas

Signature: _____ Date: _____

Monthly Facility AST Inspection Checklist

This record is for the monthly inspections conducted at the facility. Place an X in the appropriate box for each item. If any responses require elaboration, do so in the Descriptions/Comments space provided. Further descriptions or comments should be attached on a separate sheet of paper, if necessary.

AST Inspections	C1		C2		C3		C4		C5		W1		W3		W4	
	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N
STORAGE TANK																
Tank leaking?																
Tank rusting?																
Evidence of tank overfill?																
Debris around tank?																
Tank gages not operating?																
CONTAINMENT																
Containment leaking?																
Containment is damaged?																
Drain clogged/obstructed?																
Drain valve open?																
Drain valve unlocked?																
Debris in containment area?																
PIPES or HOSES																
Pipes damaged?																
Pipes deteriorating?																
STORM WATER CONVEYANCE																
Is there evidence of non-stormwater in the down channel conveyance system?																
Does the down channel conveyance system contain debris?																
Is there evidence of pollutants in the channel conveyance system (e.g. stressed or dead vegetation, colored water, pungent odor?																

Description/Comments to include all ICA areas

Signature: _____ Date: _____

Quarterly Site Inspection Report

This site inspection report should be completed quarterly. Place an X in the appropriate box for each item. If any responses require elaboration, do so in the Descriptions/Comments space provided. Further descriptions or comments should be attached on a separate sheet of paper, if necessary.

Weather: air temp.: _____°F Rain: ☐ Yes ☐ No ☐ Sunny ☐ Cloudy

☐ Jan-Mar
☐ Apr-Jun
☐ Jul-Sep
☐ Oct-Dec

PHYSICAL OBSERVATIONS *Inspections must include **all ICA** areas where industrial materials or activities are exposed to storm water, as identified in Part III B 3 of the permit, and areas where spills and leaks have occurred within the past three years. **Inspectors are responsible for inspecting the surrounding area, not limiting inspection to list below**. Extra space is provided for other findings.*

Exposure Yes	Exposure No	Area/ Tank	Industrial Materials or Activities Potentially Exposed to Storm Water	Pollutants
		A1	Unloading Areas	Exposure unlikely
		A2	Loading Areas	Exposure unlikely
		A3	Trailer Parking Area	Exposure unlikely
		A4	Truck Parking Areas	Metals, TSS
		A5	Employee Parking Areas	BOD_5, TSS, O&G,TKN, Ammonia as N
		A6	Surplus Equipment Temporary Storage Area	BOD_5, TSS, O&G, TKN, Ammonia as N
		A7	Trash / Dumpsters	BOD_5, TSS, Petroleum Hydrocarbons
		A8	Scrap Metal Dumpster	Petroleum Hydrocarbons
		A9	Fueling Area	Metals, TSS
		A10	Garage Temporary Storage Area	Metals, TSS, Petroleum Hydrocarbons

Signature: _____ Date: _____

Quarterly Site Inspection Report Cont.

This site inspection report should be completed quarterly. Place an X in the appropriate box for each item. If any responses require elaboration, do so in the Descriptions/Comments space provided. Further descriptions or comments should be attached on a separate sheet of paper, if necessary.

Weather: air temp.: _____ °F Rain: ☐ Yes ☐ No ☐ Sunny ☐ Cloudy

☐ Jan-Mar
☐ Apr-Jun
☐ Jul-Sep
☐ Oct-Dec

PHYSICAL OBSERVATIONS (if discharge is observed)

SWO 002		Outfall flow rate estimate: _____ gpm Is outfall structure damaged? ☐ Yes ☐ No			
Oder	**Color**	**Floatables**	**Turbidity**	**Deposits/ Stains**	**Vegetation conditions**
none sewage sulfide oil gas rancid-sour other	none yellow brown green gray black other	none petroleum sheen sewage grass trash other	none cloudy opaque	none sediment oily	normal excessive inhibited
			describe if not none or normal		

SWO 003		Outfall flow rate estimate: _____ gpm Is outfall structure damaged? ☐ Yes ☐ No			
Oder	**Color**	**Floatables**	**Turbidity**	**Deposits/ Stains**	**Vegetation conditions**
none sewage sulfide oil gas rancid-sour other	none yellow brown green gray black other	none petroleum sheen sewage grass trash other	none cloudy opaque	none sediment oily	normal excessive inhibited
			describe if not none or normal		

Description/Comments to include all ICA areas

Signature: _____ Date: _____

Annual Site Compliance Evaluation

The purpose of this form is to document annually the pre-existing conditions at this area of concern and to document whether those conditions have changed.

Site Changes

Yes No 1. Since the previous Annual Site Compliance Evaluation has the environmental status of the site changed?
Yes No 2. Has there been changes to:
Yes No a. Physical characteristics of the site (i.e.. new construction)?
Yes No b. Pollutants of concern?
Yes No c. Fuel products?
Yes No d. Chemicals or Materials used?
Yes No e. Interior equipment that affect air quality?
Yes No f. Tank storage type and location?
Yes No g. Management and key personnel?

If "**Yes**", add comments and explanations

Contained *= secondary containment or located within a collection drain system that is not part of the stormwater system.*

Inspection Reports

3.	Are the **Monthly Facility AST Inspections** taking place?	Yes	No
4.	Are corrective items identified in the **Monthly** reports being completed in a timely manner?	Yes	No
5.	Are the **Quarterly Site Inspections** taking place?	Yes	No
6.	Are corrective items identified in the **Quarterly** reports being completed in a timely manner?	Yes	No

Monitoring Reports

7.	Is the **Quarterly Visual Monitoring** taking place?	Yes	No
8.	Has the Annual Benchmark **Monitoring** taken place during the past?	Yes	No

Underground Sources

9.	Is the site free of fuel/oil chemical underground tanks (UST)?	Yes	No
10.	Is the site free of fuel/oil/chemical underground piping?	Yes	No

Above Grade Sources

11.	Are all fuel/oil/chemical tanks contained?	Yes	No
12.	Do all fuel/oil/chemical tanks have identification labels?	Yes	No
13.	Are all fuel/oil/chemical transfer pumps within containment?	Yes	No
14.	Are all fuel/oil/chemical and industrial material unloading areas contained?	Yes	No
15.	Have all the storm water pollutant sources been identified within the site's Environmental Plan?	Yes	No

Spill Management

16.	Is the Spill Response Equipment located in strategic location and in working condition?	Yes	No
17.	Have all fuel/oil/chemical spills less than 25 gallons been contained?	Yes	No
18.	Has the facility been free of a fuel/oil/chemical spill event over 25 gallons during past year?	Yes	No
19.	Have all spill events been documented?	Yes	No

Proper Fluid Disposal

20.	Are all waste fuel/oil/chemicals being disposed of in a proper manner?	Yes	No

***Contained** = secondary containment or located within a collection drain system that is not part of the stormwater system.*

Best management Practices

21.	Are BMP's in working condition?	Yes	No
22.	Don the installed BMP's appear to be effective in reduction of pollutants?	Yes	No
23.	Are the current BMP's effective and produce storm water in compliance with the state issued permit?	Yes	No
24.	Good Housekeeping; A clean, well-maintained area?	Yes	No

Visual Observations of Site Drainage

25.	Is the site drainage system free of debris and trash?	Yes	No
26.	Is the site drainage system free of pollutants?	Yes	No
27.	Is the site drainage system free of any unpermitted discharge?	Yes	No

Training

28.	Have the responsible site employees received training on the components of the "Environmental Plan" during the past year?	Yes	No

If "**No**", add comments and explanations

	Grade the site based on observation and knowledge gained on the Annual Site Compliance Evaluation.	Poor or High									Good or Low
29.	Site Changes	1	2	3	4	5	6	7	8	9	10
30.	Inspection Reports	1	2	3	4	5	6	7	8	9	10
31.	Monitoring Reports	1	2	3	4	5	6	7	8	9	10
32.	Underground Sources	1	2	3	4	5	6	7	8	9	10
33.	Above Grade Sources	1	2	3	4	5	6	7	8	9	10
34.	Spill Management	1	2	3	4	5	6	7	8	9	10
35.	Proper Fluid Disposal	1	2	3	4	5	6	7	8	9	10
36.	Best Management Practices	1	2	3	4	5	6	7	8	9	10
37.	Visual Observations of Site Drainage	1	2	3	4	5	6	7	8	9	10
38.	Training	1	2	3	4	5	6	7	8	9	10

Annual Compliance Score _____

Description/Comments to include all ICA areas

Signature: _____ Date: _____

Transfer Operations Inspection Form

Inspection date: _____

Inspector: _____

Date of last inspection: _____

Equipment	Leakage noted, corrosion, other comments	Operator
Loading rack piping		
Loading rack valves		
Base oil transfer pump piping		
Base oil transfer pump valves		
Base oil tank piping		
Base oil tank valves		
Blending tank piping		
Blending tank valves		

Any follow-up required?

Description/Comments to include all ICA areas

Signature: _____ Date: _____

Containment Drainage Inspection Report

A properly trained operator has inspected the containment area for the presence of an oily sheen or other contaminants. If no sheen or contaminants are noted, the drainage valve has been unlocked and the containment has been drained:

☐ Yes ☐ No If **YES:** Date _____ Time _____

After draining, the valve has been properly locked out and the key has been returned according to established procedures.

☐ Yes ☐ No

If an oily sheen has been observed or other contaminants are present:

Date oil recycling contractor was notified_____

Time oil recycling contractor was notified_____

Name of oil recycling contractor _____

Address of oil recycling contractor_____

Phone number of oil recycling contractor_____

Date contaminated containment water was removed _____

If applicable, paperwork confirmation from oil recycling contractor regarding the removal of the contaminated water is attached to this report: ☐ Yes ☐ No

Description/Comments to include all ICA areas

Signature: _____ Date: _____

Monitoring Forms

VIRGINIA POULTRY GROWERS COOPERATIVE

HINTON PROCESSING PLANT

Street Address:
6349 Rawley Pike
Hinton, VA 22831
540-867-4028

Quarterly Visual Monitoring Report

General Permit for Storm Water Discharges Associated with Industrial Activity, Sector-U
No.: VAR

Outfall No.:	
	January 1 to March 31
	April 1 to June 30
	July 1 to September 30
	October 1 to December 31

The permittee must perform and document a quarterly visual examination of a storm water discharge associated with industrial activity for each outfall. The examination(s) must be made at least once in each three month calendar quarters.

Visual examinations must be made of samples collected within the first 30 minutes (or as soon thereafter as practical, but not to exceed one hour) of when the runoff or snowmelt begins discharging from the facility. The examination must document observations of the parameters listed below and must be conducted in a well-lit area. All samples (except snowmelt samples) must be collected from the discharge resulting from a storm event that is greater than 0.1 inches in magnitude and that occurs at least 72 hours from the previously measurable (greater than 0.1 inches rainfall) storm event. The 72 hour storm interval is waived when the preceding measurable storm did not yield a measurable discharge, or if the permittee is able to document that less than a 72 hour interval is representative for local storm events during the sampling period.

Rain Event	
Time rain event started:	
Duration of storm event:	*hr*
Total of rainfall sampled event:	*in*
Time since last rain event:	*days* / *hr*

Sample and Report
Sampling Date:
Time sample was taken:
Sample taken by (*sign*):
Report Date:
Report by (*sign*):

Visual Examination

Fill out once per calendar quarter.	Excellent — Quality Scale — Poor										*Visual examination(s) must be made during normal facility operations and examination of the collected sample(s) must be conducted in a well-lit area.* *Probable sources of any observed storm water contaminations.*
	1	2	3	4	5	6	7	8	9	10	
Color											
Odor											
Clarity											
Floating Solids											
Settled Solids											
Suspended Solids											
Foam											
Oil Sheen											
Other											

When practicable, the same individual should carry out the collection and examination of discharges for the entire permit term. If no qualifying storm event resulted in runoff from the facility during a monitoring quarter, the permittee is excused from visual monitoring for that quarter provided that documentation is included with the monitoring records indicating that no qualifying storm event occurred that resulted in storm water runoff during that quarter. The documentation must be signed and certified in accordance with Part II.K. of the permit.

The visual examination reports must be maintained on-site with the Storm Water Pollution Prevention Plan (SWP3).

Signature: _____ Date: _____

DEQ Permit Page

Daily Rain/Weather Log

Recorder Info			Rain Event Data			
Initials	Time of logging	Date	Rain Gauge Level	Start Time	End Time	Begin of Runoff
		1				
		2				
		3				
		4				
		5				
		6				
		7				
		8				
		9				
		10				
		11				
		12				
		13				
		14				
		15				
		16				
		17				
		18				
		19				
		20				
		21				
		22				
		23				
		24				
		25				
		26				
		27				
		28				
		29				
		30				

Permit

VIRGINIA POULTRY GROWERS COOPERATIVE

HINTON PROCESSING PLANT

Street Address:
6349 Rawley Pike
Hinton, VA 22831
540-867-4028

Permit No. VA0002313

Effective Date: December 1, 2009
Expiration Date: November 30, 2014

AUTHORIZATION TO DISCHARGE UNDER THE

VIRGINIA POLLUTANT DISCHARGE ELIMINATION SYSTEM

AND

THE VIRGINIA STATE WATER CONTROL LAW

In compliance with the provisions of the Clean Water Act as amended and pursuant to the State Water Control Law and regulations adopted pursuant thereto, the following owner is authorized to discharge in accordance with the information submitted with the permit application, and with this permit cover page, Part I - Effluent Limitations and Monitoring Requirements, and Part II – Conditions Applicable To All VPDES Permits, as set forth herein.

Owner:	**Virginia Poultry Growers Cooperative, Inc**
Facility Name:	**Virginia Poultry Growers Cooperative-Hinton**
County:	**Rockingham**
Facility Location:	**6349 Rawley Pike, Hinton**

The owner is authorized to discharge to the following receiving stream:

Stream:	**Muddy Creek (Outfalls 001 and 003)** **War Branch (Outfall 002)**
River Basin:	Potomac
River Subbasin:	Shenandoah
Section:	5
Class:	IV
Special Standards:	pH

_____
Deputy Regional Director, Valley Region

_____
Date

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

1. During the period beginning with the permit's effective date and lasting until the permit's expiration date, or until three consecutive monthly average flows equal or exceed 1.045 MGD, whichever occurs first, the permittee is authorized to discharge from Outfall 001.

This discharge shall be limited and monitored as specified below:

EFFLUENT CHARACTERISTICS	DISCHARGE LIMITATIONS				MONITORING REQUIREMENTS	
	Monthly Average		Minimum	Maximum	Frequency	Sample Type
Flow (MGD)[a]	NL		NA	NL	Continuous	TIRE
pH (standard units)	NA		6.5	9.0	1/Day	Grab
BOD_5 [c,e]	15 mg/L	62 kg/d	NA	26 mg/L 110 kg/d	2/Month	24 HC
Suspended Solids [c]	20 mg/L	83 kg/d	NA	30 mg/L 120 kg/d	1/Month	24 HC
Fecal Coliform (N/100 mL)	NL		NA	400 Geometric Mean	1/Year	Grab
E. coli (N/100 mL) [b]	126 Geometric Mean		NA	NA	3 Days/Week @ 48 hr intervals between 10 am to 4 pm	Grab
Dissolved Oxygen (mg/L)	NA		6.0	NA	1/Day	Grab
Ammonia-N (mg/L) [c]	4.0		NA	8.0	1/Week	24 HC
Whole Effluent Toxicity (TU_c) [d]	NA		NA	2.17	1/Year	24 HC
Oil and Grease (as HEM) [f]	8.0 mg/L	33 kg/d	NA	14 mg/L 58 kg/d	1/Month	Grab
Nitrate (as N) [c,e]	15 mg/L	61 kg/d	NA	30 mg/L 120 kg/d	2/Month	24 HC
Total Nitrogen	103 mg/L	430 kg/d	NA	147 mg/L 610 kg/d	2/Month	Calculated

NL = No Limitation, monitoring required *NA = Not Applicable* *TIRE = Totalizing, Indicating, and Recording Equipment* *24 HC = 24-Hour Composite*

a. The design flow of this treatment facility is 1.5 MGD. The above effluent limitations and monitoring requirements are based on a permitted flow tier of 1.1 MGD. See Part I.E.1. for additional requirements related to facility flows.
b. See Part I.B. for alternative disinfection requirements.
c. See Part I.C. for additional monitoring and reporting instructions.
d. See Part I.D. for additional monitoring and reporting instructions.
e. 2/Month = two samples taken during the calendar month, no less than 7 days apart.
f. Oil and Grease shall be measured as n-hexane extractable material.
g. This facility has Total Nitrogen and Total Phosphorus calendar year load limits associated with this outfall included in the current Registration List under registration number VAN010009, enforceable under the General VPDES Watershed Permit Regulation for Total Nitrogen and Total Phosphorus Discharges and Nutrient Trading in the Chesapeake Watershed in Virginia.
h. There shall be no discharge of floating solids or visible foam in other than trace amounts.

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

2. During the period following three consecutive monthly average flows which equal or exceed 1.045 MGD, and lasting until the permit's expiration date, the permittee is authorized to discharge from Outfall 001.

This discharge shall be limited and monitored as specified below:

EFFLUENT CHARACTERISTICS	DISCHARGE LIMITATIONS				MONITORING REQUIREMENTS	
	Monthly Average		Minimum	Maximum	Frequency	Sample Type
Flow (MGD) [a]	NL		NA	NL	Continuous	TIRE
pH (standard units)	NA		6.5	9.0	1/Day	Grab
BOD_5 [c,g]	14 mg/L	79 kg/d	NA	26 mg/L 150 kg/d	2/Month	24 HC
Suspended Solids [c]	20 mg/L	110 kg/d	NA	30 mg/L 170 kg/d	1/Month	24 HC
Fecal Coliform (N/100 mL)	NL		NA	400 Geometric Mean	1/Year	Grab
E. coli (N/100 mL) [b]	97 Geometric Mean		NA	NA	3 Days/Week @ 48 hr intervals between 10 am to 4 pm	Grab
Dissolved Oxygen (mg/L)	NA		6.0	NA	1/Day	Grab
Ammonia-N (mg/L) [e]	4.0		NA	7.7	1/Week	24 HC
Whole Effluent Toxicity (TU_c) [d]	NA		NA	1.96	1/Year	24 HC
Oil and Grease (as HEM) [f]	8.0 mg/L	45 kg/d	NA	14 mg/L 80 kg/d	1/Month	Grab
Nitrate (as N) [c,g]	11 mg/L	61 kg/d	NA	22 mg/L 120 kg/d	2/Month	24 HC
Total Nitrogen	103 mg/L	580 kg/d	NA	147 mg/L 830 kg/d	2/Month	Calculated

NL = No Limitation, monitoring required *NA = Not Applicable* *TIRE = Totalizing, Indicating, and Recording Equipment* *24 HC = 24-Hour Composite*

a. The design flow of this treatment facility is 1.5 MGD. See Part I.E.1. for additional requirements related to facility flows.
b. See Part I.B. for alternative disinfection requirements.
c. See Part I.C. for additional monitoring and reporting instructions.
d. See Part I.D. for additional monitoring and reporting instructions.
e. 2/Month = two samples taken during the calendar month, no less than 7 days apart.
f. Oil and Grease shall be measured as n-hexane extractable material.
g. Total Nitrogen, which is the sum of Total Kjeldahl Nitrogen (as N) and Nitrate plus Nitrite (as N), shall be derived from the results of those tests.
h. This facility has Total Nitrogen and Total Phosphorus calendar year load limits associated with this outfall included in the current Registration List under registration number VAN010009, enforceable under the General VPDES Watershed Permit Regulation for Total Nitrogen and Total Phosphorus Discharges and Nutrient Trading in the Chesapeake Watershed in Virginia.
i. There shall be no discharge of floating solids or visible foam in other than trace amounts.

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

3. During the period beginning with the permit's effective date and lasting until the permit's expiration date, the permittee is authorized to discharge from Outfall 101 (discharge from sewage treatment works prior to mixing with treated poultry processing wastewater).

This discharge shall be limited and monitored as specified below:

EFFLUENT CHARACTERISTICS	DISCHARGE LIMITATIONS					MONITORING REQUIREMENTS	
	Monthly Average		Weekly Average		Minimum	Maximum	Frequency	Sample Type
Flow (MGD) [a]	NL		NA		NA	NL	1/Month	Estimate
pH (standard units)	NA		NA		6.5	9.5	1/Month	Grab
BOD_5 [c]	30 mg/L	2.3 kg/d	45 mg/L	3.4 kg/d	NA	NA	1/Month	Grab
Suspended Solids [c]	30 mg/L	2.3 kg/d	45 mg/L	3.4 kg/d	NA	NA	1/Month	Grab
E. coli (N/100 mL) [b]	126 Geometric Mean		NA		NA	NA	1/Week 10 am to 4 pm	Grab

NL = No Limitation, monitoring required
NA = Not Applicable

a. The design flow of this treatment facility is 0.020 MGD. See Part I.E.1. for additional requirements related to facility flows.
b. See Part I.B. for alternative disinfection requirements.
c. See Part I.C. for additional monitoring and reporting instructions.

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

4. During the period beginning with the permit's effective date and lasting until the permit's expiration date, the permittee is authorized to discharge from Outfall 002 (raw water reservoir overflow and storm water runoff) and Outfall 003 (storm water runoff).

This discharge shall be limited and monitored as specified below:

EFFLUENT CHARACTERISTICS	DISCHARGE LIMITATIONS				MONITORING REQUIREMENTS	
	Monthly Average	Weekly Average	Minimum	Maximum	Frequency	Sample Type
There shall be no discharge of process wastewater from these outfalls. Also, there shall be no discharge of floating solids or visible foam in other than trace amounts. No monitoring is required.						

B. TRC AND E. COLI EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

If chlorination is chosen as a disinfection method, TRC and E. coli shall be limited and monitored by the permittee as specified below:

1. Effluent TRC shall be monitored, following dechlorination, 1/day by grab sample and limited as specified below:

Flow Tier	Monthly Average	Maximum
1.1 MGD	0.012 mg/L	0.023 mg/L
1.5 MGD	0.010 mg/L	0.020 mg/L

2. TRC shall be monitored at the outlet of the chlorine contact tank serving the poultry processing wastewater treatment facility, prior to dechlorination, 4 times per day at 4-hour intervals by grab sample.

3. No more than 12 samples for TRC taken after the chlorine contact tank serving the poultry processing wastewater treatment facility, prior to dechlorination, shall be less than 1.0 mg/L for any one calendar month.

4. TRC shall be monitored at the outlet of the chlorine contact tank serving the sewage treatment facility, prior to dechlorination, 1/day by grab sample.

5. No more than 3 samples for TRC taken after the chlorine contact tank serving the sewage treatment facility, prior to dechlorination, shall be less than 1.0 mg/L for any one calendar month.

6. No TRC sample collected after either chlorine contact tank, prior to dechlorination, shall be less than 0.6 mg/L.

7. E. coli limitations and monitoring:

	Discharge Limit	Monitoring Requirements	
	Monthly Average	Frequency	Sample Type
E. coli	126	2/Month	Grab
(N/100 mL)	(Geometric Mean)	At least 7 days apart between 10 am and 4 pm	

The requirements in B.1-7 above, if applicable, shall substitute for the E. coli requirements specified in Part I.A.

C. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS - ADDITIONAL INSTRUCTIONS

1. Quantification Levels (QLs) shall be less than or equal to the following concentrations:

Effluent Characteristic	QL
BOD_5	5 mg/L
Suspended Solids	1.0 mg/L
Chlorine	0.10 mg/L
Ammonia-N	0.20 mg/L
Oil & Grease	5.0 mg/L

2. Compliance Reporting Under Part I.A.

a. Monthly Average -- Compliance with the monthly average limitations and/or reporting requirements for the parameters listed in Part I.C.1. above shall be determined as follows: All data below the test method QL shall be treated as zeros. All data equal to or above the test method QL shall be treated as reported. Arithmetic concentration and/or loading averages (as applicable) shall be calculated using all reported data for the month, including the defined zeros. These averages shall be reported on the Discharge Monitoring Report (DMR). If all data are less than the test method QL, then "<QL" shall be reported on the DMR for the concentration and/or loading values. Otherwise the average values shall be reported as calculated.

b. Maximum Weekly Average -- Compliance with the weekly average limitations and/or reporting requirements for the parameters listed in Part I.C.1. above shall be determined as follows: All data below the test method QL shall be treated as zeros. All data equal to or above the test method QL shall be treated as reported. Arithmetic concentration and/or loading averages (as applicable) shall be calculated using all reported data, including the defined zeros, collected within each complete calendar week entirely contained within the reporting month. The maximum weekly concentration and/or loading averages thus determined shall be reported on the DMR. If all data are less than the test method QL, then "<QL" shall be reported on the DMR for both the concentration and/or loading values. Otherwise the average values shall be reported as calculated.

c. Daily Maximum -- Compliance with the daily maximum limitations and/or reporting requirements for the parameters listed in Part I.C.1. above shall be determined as follows: All data below the test method QL shall be treated as zeros. All data equal to or above the test method QL shall be treated as reported. An arithmetic average shall be calculated using all reported data, including the defined zeros, collected within each day during the reporting month. The maximum value of these daily averages thus determined shall be reported on the DMR as the Daily Maximum. If all data are less than the test method QL, then "<QL" shall be reported on the DMR for the concentration and/or loading values.

d. Any single datum required shall be reported as "<QL" if it is less than the test method QL. Otherwise, the numerical value shall be reported.

e. The permittee shall report at least the same number of significant digits as the permit limit for a given parameter. Regardless of the rounding convention used (i.e., 5 always rounding up or to the nearest even number) by the permittee, the permittee shall use the convention consistently, and shall ensure that consulting laboratories employed by the permittee use the same convention.

D. WHOLE EFFLUENT TOXICITY (WET) LIMITATIONS AND MONITORING REQUIREMENTS

1. The WET limits in Part I.A. are effective as follows:

Flow Tier	WET Limitation	Effective Date	Expiration Date
1.1 MGD	$TU_c = 2.17$ (NOEC $\geq$ 46%)	December 1, 2009	Until the permit's expiration date, or until three consecutive monthly average flows equal or exceed 1.045 MGD, whichever occurs first
1.5 MGD	$TU_c = 1.96$ (NOEC $\geq$ 51%)	Following three consecutive monthly average flows which equal or exceed 1.045 MGD	Until the permit's expiration date

2. In accordance with the schedule in Part I.D.4 below, the permittee shall conduct annual chronic toxicity tests using 24-hour flow-proportioned composite samples of final effluent from Outfall 001.

   The chronic toxicity tests to use are:
   Chronic 3-Brood Static Renewal Survival and Reproduction Test using *Ceriodaphnia dubia*
   Chronic 7-Day Static Renewal Survival and Growth Test using *Pimephales promelas*

   Each test shall be performed with a minimum of 5 dilutions, derived geometrically, in order to determine the No Observed Effect Concentration (NOEC) for survival and reproduction/growth. Express the results as Chronic Toxicity Units (TU_c) by dividing 100/NOEC. Report the LC_{50} for each chronic test at the 48-hour point, and the IC_{25}, if calculable, with the NOEC in the required test report.

   Test procedures and reporting shall be in accordance with the WET testing methods cited in 40 CFR 136.3.

3. The permit may be modified or revoked and reissued to include pollutant-specific limits in lieu of a WET limit should it be demonstrated that toxicity is due to specific parameters. The pollutant-specific limits must control the toxicity of the effluent.

4. Report Schedule: The permittee shall supply 1 copy of the test report for the toxicity tests specified in Part I.D.2 in accordance with the following schedule:

Monitoring Period	Testing Period	Report Submittal Dates
1st Annual	January 1, 2010 – January 31, 2010	By March 10, 2010
Annually thereafter	At 12 month intervals from the first annual test period	At 12 month intervals from the first annual submittal date

E. OTHER REQUIREMENTS AND SPECIAL CONDITIONS

1. 95% Capacity Reopener -- A written notice and a plan of action for ensuring continued compliance with the terms of this permit shall be submitted to:

   Department of Environmental Quality
   Valley Regional Office
   P.O. Box 3000
   Harrisonburg, Virginia 22801

   when the monthly average flow influent to the wastewater treatment facilities reaches 95 percent of the design capacity authorized in this permit for each month of any three consecutive month period. The written notice shall be submitted within 30 days and the plan of action shall be received at the DEQ-Valley Regional Office no later than 90 days from the third consecutive month for which the flow reached 95 percent of the design capacity. The plan shall include the necessary steps and a prompt schedule of implementation for controlling any current or reasonably anticipated problem resulting from high influent flows. Failure to submit an adequate plan in a timely manner shall be deemed a violation of this permit.

2. Materials Handling/Storage -- Any and all product, materials, industrial wastes, and/or other wastes resulting from the purchase, sale, mining, extraction, transport, preparation, and/or storage of raw or intermediate materials, final product, by-product or wastes, shall be handled, disposed of, and/or stored in such a manner so as not to permit a discharge of such product, materials, industrial wastes, and/or other wastes to State waters, except as expressly authorized.

3. Operations and Maintenance (O&M) Manual Requirements –

   a. The permittee shall maintain a current and approved O&M Manual for the treatment works. This manual shall detail the practices and procedures which will be followed to ensure compliance with the requirements of this permit. This manual shall include, but not necessarily be limited to, the following items:

      a. Treatment system design, treatment system operation, routine preventive maintenance of units within the treatment system, critical spare parts inventory and record keeping;
      b. Techniques to be employed in the collection, preservation, and analysis of effluent samples;
      c. Procedures for handling, storing, and disposing of all wastes, fluids, and pollutants characterized in Part I.E.2 that will prevent these materials from reaching state waters;
      d. Procedures for documenting compliance with the permit requirement that there shall be no discharge of floating solids or visible foam in other than trace amounts; and
      (5) An Industrial Sludge Management Plan.

      The permittee shall operate the treatment works in accordance with the approved O&M Manual. Any changes in the practices and procedures followed by the permittee shall be documented and submitted for DEQ approval within 90 days of the effective date of the changes. Upon approval of the submitted manual changes, the revised manual becomes an enforceable part of the permit. Noncompliance with the O&M Manual shall be deemed a violation of the permit.

   b. Within 60 days of the effective date of the permit, the permittee shall submit to the DEQ-Valley Regional Office for approval revisions to the O&M Manual that address documenting compliance with the permit requirement that there shall be no discharge of floating solids or visible foam in other than trace amounts.

4. Concept Engineering Report (CER) Requirement -- This facility shall submit a CER for DEQ approval prior to installation of any nutrient removal wastewater treatment technology. Upon approval of a CER for the installation of nutrient removal technology, DEQ staff shall initiate modification or, alternatively, revocation and reissuance, of this permit to include annual concentration limits based on the technology proposed in the CER. The permittee shall inform the DEQ regional office within 14 days of completion of construction of any project for which a CER has been approved. Upon completion of construction in accordance with a CER that has been approved by DEQ, any nutrient removal facilities installed shall be operated to achieve the design effluent TN and TP concentrations.

5. Certificate to Construct (CTC) / Certificate of Operate (CTO) Requirement – The permittee shall, in accordance with the DEQ Sewage Collection and Treatment Regulation (9 VAC 25-790), obtain a CTC and a CTO prior to constructing and operating the sewage treatment works. Noncompliance with the CTC or CTO shall be deemed a violation of the permit.

6. Sludge Management Plan (SMP) Requirement -- The permittee shall conduct all sewage sludge use or disposal activities in accordance with the SMP approved with the reissuance of this permit. Any proposed changes in the sewage sludge use or disposal practices or procedures followed by the permittee shall be documented and submitted for DEQ approval 90 days prior to the effective date of the changes. Upon approval, the SMP becomes an enforceable part of the permit. This permit may be modified or, alternatively, revoked and reissued to incorporate limitations/conditions necessitated by substantive changes in sewage sludge use or disposal practices.

7. Licensed Operator Requirement -- The permittee shall employ or contract at least one Class II licensed wastewater works operator for this facility. The license shall be issued in accordance with Title 54.1 of the Code of Virginia and the regulations of the Board for Waterworks and Wastewater Works Operators. The permittee shall notify the DEQ-Valley Regional Office in writing whenever he is not complying, or has grounds for anticipating he will not comply with this requirement. The notification shall include a statement of reasons and a prompt schedule for achieving compliance.

8. Reliability Class -- The permitted sewage treatment works shall meet Reliability Class II.

9. Water Quality Criteria Monitoring -- The permittee shall monitor the effluent at Outfall 001 for the substances noted in Attachment A of this permit according to the indicated analysis number, quantification level, sample type and frequency. Monitoring shall be initiated after the start of the third year from the permit's effective date. Using Attachment A as the reporting form, the data shall be submitted with the next permit reissuance application which is due at least 180 days prior to the expiration date of this permit. Monitoring and analyses shall be conducted in accordance with 40 CFR Part 136 or alternative EPA approved method. Methods other than those specified in Attachment A may be used with prior notification to and approval from DEQ. It is the responsibility of the permittee to ensure that proper QA/QC protocols are followed during the sample gathering and analytical procedures. DEQ will use these data for making specific permit decisions in the future. This permit may be modified or, alternatively, revoked and reissued to incorporate limits for any of the substances listed in Attachment A.

10. Treatment Works Closure Plan -- If the permittee plans an expansion or upgrade to replace the existing treatment works, or if the facility is permanently closed, the permittee shall submit to the DEQ-Valley Regional Office a closure plan for the existing treatment works. The plan shall address the following information as a minimum: Verification of elimination of sources and/or alternate treatment scheme; treatment, removal and final disposition of residual wastewater and solids; removal/demolition/disposal of structures, equipment, piping and appurtenances; site grading, and erosion and sediment control; restoration of site vegetation; access control; fill materials; and proposed land use (post-closure) of the site. The plan should contain proposed dates for beginning and completion of the work. The plan must be approved by the DEQ prior to implementation. The permittee shall sample once for each foot of drawdown, and, when the discharge no longer meets permit limits, the discharge shall cease and the rest of the lagoon contents shall be pumped and hauled to another, permitted facility for treatment and disposal.

11. Reopeners -- This permit may be modified or, alternatively, revoked and reissued:

    a. If any approved waste load allocation procedure, pursuant to Section 303(d) of the Clean Water Act, imposes waste load allocations, limits or conditions on the facility that are not consistent with the permit requirements; or
    b. To incorporate technology-based effluent concentration limitations for nutrients in conjunction with the installation of nutrient control technology, whether by new construction, expansion or upgrade; or
    c. To incorporate alternative nutrient limitations and/or monitoring requirements, should:
        (1) the State Water Control Board adopt new nutrient standards for the water body receiving the discharge, including the Chesapeake Bay or its tributaries; or
        (2) a future water quality regulation or statute require new or alternative nutrient control; or
    d. If any applicable standard for sewage sludge use or disposal promulgated under Section 405(d) of the Clean Water Act is more stringent than any requirements for sludge use or disposal in this permit, or controls a pollutant or practice not limited in this permit.

12. Notification Levels -- The permittee shall notify the DEQ-Valley Regional Office as soon as they know or have reason to believe:

    a. That any activity has occurred or will occur which would result in the discharge, on a routine or frequent basis, of any toxic pollutant which is not limited in this permit, if that discharge will exceed the highest of the following notification levels:
        (1) 100 µg/L;
        (2) 200 µg/L for acrolein and acrylonitrile; 500 µg/L for 2,4-dinitrophenol and for 2-methyl-4,6-dinitrophenol; and 1 mg/L for antimony;
        (3) Five times the maximum concentration value reported for that pollutant in the permit application; or
        (4) The level established by the Board.
    b. That any activity has occurred or will occur which would result in any discharge, on a non-routine or infrequent basis, of a toxic pollutant which is not limited in this permit, if that discharge will exceed the highest of the following notification levels:
        (1) 500 µg/L;
        (2) 1 mg/L for antimony;
        (3) Ten times the maximum concentration value reported for that pollutant in the permit application; or
        (4) The level established by the Board.

F. STORM WATER MANAGEMENT CONDITIONS

1. General Storm Water Special Conditions –

a. Sample Type

For all storm water monitoring required in Part I.A or other applicable sections of this permit, a minimum of one grab sample shall be taken. Unless otherwise specified, all such samples shall be collected from the discharge resulting from a storm event that occurs at least 72 hours from the previously measurable storm event (a "measurable storm event" is defined as a storm event that results in an actual discharge from the site). The required 72-hour storm event interval is waived where the permittee documents that less than a 72-hour interval is representative for local storm events during the season when sampling is being conducted. The grab sample shall be taken during the first 30 minutes of the discharge. If the collection of a grab sample during the first 30 minutes is impracticable, a grab sample can be taken during the first hour of the discharge, and the permittee shall submit with the monitoring report a description of why a grab sample during the first 30 minutes was impracticable. If storm water discharges associated with industrial activity commingle with process or non-process water, then where practicable permittees must attempt to sample the storm water discharge before it mixes with the non-storm water discharge.

b. Recording of Results

For each measurement or sample taken pursuant to the storm event monitoring requirements of this permit, the permittee shall record and report with the Discharge Monitoring Reports (DMRs) the following information:

(1) The date and duration (in hours) of the storm event(s) sampled;
(2) The rainfall total(in inches) of the storm event which generated the sampled discharge; and
(3) The duration between the storm event sampled and the end of the previous measurable storm event.

In addition, the permittee shall maintain a monthly log documenting the amount of rainfall received at this facility on a daily basis. A summarization of this information shall also be submitted with the DMRs.

c. Sampling Waiver

When a permittee is unable to collect storm water samples required in Part I.A or other applicable sections of this permit within a specified sampling period due to adverse climatic conditions, the permittee shall collect a substitute sample from a separate qualifying event in the next period and submit these data along with the data for the routine sample in that period. Adverse weather conditions that may prohibit the collection of samples include weather conditions that create dangerous conditions for personnel (such as local flooding, high winds, hurricane, tornadoes, electrical storms, etc.) or otherwise make the collection of a sample impracticable (drought, extended frozen conditions, etc.).

d. Representative Discharges

When a facility has two or more outfalls that discharge substantially identical effluents, based on similarities of the industrial activities, significant materials, size of drainage areas, and storm water management practices occurring within the drainage areas of the outfalls, the permittee may test the effluent of one of such outfalls and report that the quantitative data also apply to the substantially identical outfall(s) provided that: (1) the representative outfall determination has been approved by DEQ prior to data submittal; and (2) the permittee includes in the Storm Water Pollution Prevention Plan (SWPPP) a description of the location of the outfalls and explains in detail why the outfalls are expected to discharge substantially identical effluents.

e. Quarterly Visual Examination of Storm Water Quality

(1) The permittee must perform and document a quarterly visual examination of a storm water discharge associated with industrial activity from each outfall, except discharges exempted below. The examination(s) must be made at least once in each of the following three-month periods: January through March, April through June, July through September, and October through December. The visual examination must be made during daylight hours (e.g., normal working hours). If no storm event resulted in runoff from the facility during a monitoring quarter, the permittee is excused from visual monitoring for that quarter provided that documentation is included with the monitoring records indicating that no runoff occurred. The documentation must be signed and certified in accordance with Part II.K. of this permit.

(2) Visual examinations must be made of samples collected within the first 30 minutes (or as soon thereafter as practical, but not to exceed one hour) of when the runoff or snowmelt begins discharging from the facility. The examination must document observations of color, odor, clarity, floating solids, settled solids, suspended solids, foam, oil sheen, and other obvious indicators of storm water pollution. The examination must be conducted in a well-lit area. No analytical tests are required to be performed on the samples. All samples (except snowmelt samples) must be collected from the discharge resulting from a storm event that results in an actual discharge from the site (defined as a "measurable storm event"), and that occurs at least 72 hours from the previously measurable storm event. The 72-hour storm interval is waived if the permittee is able to document that less than a 72-hour interval is representative for local storm events during the sampling period. Where practicable, the same individual should carry out the collection and examination of discharges for the entire permit term. If no qualifying storm event resulted in runoff during daylight hours from the facility during a monitoring quarter, the permittee is excused from visual monitoring for that quarter provided that documentation is included with the monitoring records indicating that no qualifying storm event occurred during daylight hours that resulted in storm water runoff during that quarter. The documentation must be signed and certified in accordance with Part II.K.

(3) The visual examination reports must be maintained on-site with the SWPPP. The report must include the outfall location, the examination date and time, examination personnel, the nature of the discharge (i.e., runoff or snow melt), visual quality of the storm water discharge (including observations of color, odor, clarity, floating solids, settled solids, suspended solids, foam, oil sheen, and other obvious indicators of storm water pollution), and probable sources of any observed storm water contamination.

(4) If the facility has two or more outfalls that discharge substantially identical effluents, based on similarities of the industrial activities, significant materials, size of drainage areas, and storm water management practices occurring within the drainage areas of the outfalls, the permittee may conduct visual monitoring on the effluent of just one of the outfalls and report that the observations also apply to the substantially identical outfall(s), provided that the permittee includes in the SWPPP a description of the location of the outfalls and explains in detail why the outfalls are expected to discharge substantially identical effluents. In addition, for each outfall that the permittee believes is representative, an estimate of the size of the drainage area (in square feet) and an estimate of the runoff coefficient of the drainage area (i.e., low (under 40 percent), medium (40 to 65 percent), or high (above 65 percent)) shall be provided in the plan.

(5) When the permittee is unable to conduct the visual examination due to adverse climatic conditions, the permittee must document the reason for not performing the visual examination and retain this documentation onsite with the records of the visual examinations. Adverse weather conditions that may prohibit the collection of samples include weather conditions that create dangerous conditions for personnel (such as local flooding, high winds, hurricane, tornadoes, electrical storms, etc.) or otherwise make the collection of a sample impracticable (drought, extended frozen conditions, etc.).

f. Allowable Non-Storm Water Discharges

(1) The following non-storm water discharges are authorized by this permit provided the non-storm water component of the discharge is in compliance with f(2) below:
   (a) Discharges from fire fighting activities;
   (b) Fire hydrant flushings;
   (c) Potable water including water line flushings;
   (d) Uncontaminated air conditioning or compressor condensate;
   (e) Irrigation drainage;
   (f) Landscape watering provided all pesticides, herbicides, and fertilizer have been applied in accordance with manufacturer's instructions;
   (g) Pavement wash waters where no detergents are used and no spills or leaks of toxic or hazardous materials have occurred (unless all spilled material has been removed);
   (h) Routine external building wash down which does not use detergents;
   (i) Uncontaminated ground water or spring water;
   (j) Foundation or footing drains where flows are not contaminated with process materials; and
   (k) Incidental windblown mist from cooling towers that collects on rooftops or adjacent portions of the facility, but NOT intentional discharges from the cooling tower (e.g., "piped" cooling tower blowdown or drains).

(2) Except for flows from fire fighting activities, the SWPPP must include:
   (a) Identification of each allowable non-storm water source;
   (b) The location where the non-storm water is likely to be discharged; and
   (c) Descriptions of appropriate BMPs for each source.

(3) If mist blown from cooling towers is included as one of the allowable non-storm water discharges from the facility, the permittee must specifically evaluate the discharge for the presence of chemicals used in the cooling tower. The evaluation shall be included in the SWPPP.

g. Releases of Hazardous Substances or Oil in Excess of Reportable Quantities

The discharge of hazardous substances or oil in the storm water discharge(s) from the facility shall be prevented or minimized in accordance with the SWPPP for the facility. This permit does not authorize the discharge of hazardous substances or oil resulting from an on-site spill. This permit does not relieve the permittee of the reporting requirements of 40 CFR 110, 40 CFR 117 and 40 CFR 302 or § 62.1-44.34:19 of the Code of Virginia. Where a release containing a hazardous substance or oil in an amount equal to or in excess of a reportable quantity established under either 40 CFR 110, 40 CFR 117 or 40 CFR 302 occurs during a 24-hour period:

(1) The permittee is required to notify the Department in accordance with the requirements of Part II.G as soon as he or she has knowledge of the discharge;

(2) Where a release enters a municipal separate storm sewer system (MS4), the permittee shall also notify the owner or the MS4; and

(3) The SWPPP required by this permit must be reviewed to identify measures to prevent the reoccurrence of such releases and to respond to such releases, and the plan must be modified where appropriate.

h. Additional Requirements for Salt Storage

Storage piles of salt or piles containing salt used for deicing or other commercial or industrial purposes shall be enclosed or covered to prevent exposure to precipitation. The permittee shall implement appropriate measures (e.g., good housekeeping, diversions, containment) to minimize exposure resulting from adding to or removing materials from the pile. All salt storage piles shall be located on an impervious surface. All runoff from the pile, and/or runoff that comes in contact with salt, including under drain systems, shall be collected and contained within a bermed basin lined with concrete or other impermeable materials., or within an underground storage tank(s), or within an above ground storage tank(s), or disposed of through a sanitary sewer (with the permission of the treatment facility). A combination of any or all of these methods may be used. In no case shall salt contaminated storm water be allowed to discharge directly to the ground or to state waters.

2. Storm Water Pollution Prevention Plan (SWPPP) --

Refer to Part I.B.3 for sector-specific storm water management requirements.

A SWPPP for the facility was required to be developed and implemented under the previous permit. The existing SWPPP shall be reviewed and modified, as appropriate, to conform to the requirements of this section.

Permittees shall implement the provisions of the SWPPP as a condition of this permit.

The SWPPP requirements of this permit may be fulfilled, in part, by incorporating by reference other plans or documents such as a spill prevention control and countermeasure (SPCC) plan developed for the facility under Section 311 of the Clean Water Act, or best management practices (BMP) programs otherwise required for the facility, provided that the incorporated plan meets or exceeds the plan requirements of Part I.B.2.b (Contents of the Plan). All plans incorporated by reference into the SWPPP become enforceable under this permit. If a plan incorporated by reference does not contain all of the required elements of the SWPPP of Part I.B.2.b the permittee shall develop the missing SWPPP elements and include them in the required plan.

a. Deadlines for Plan Preparation and Compliance
   (1) The facility shall prepare and implement the SWPPP as expeditiously as practicable, but not later than 270 days from the effective date of the permit.
   (2) Measures That Require Construction. In cases where construction is necessary to implement measures required by the plan, the plan shall contain a schedule that provides compliance with the plan as expeditiously as practicable, but no later than 3 years after the effective date of this permit. Where a construction compliance schedule is included in the plan, the schedule shall include appropriate nonstructural and/or temporary controls to be implemented in the affected portion(s) of the facility prior to completion of the permanent control measure.

b. Contents of the Plan
   The contents of the SWPPP shall comply with the requirements listed below and those in Part I.B.3. The plan shall include, at a minimum, the following items:
   (1) Pollution Prevention Team. The plan shall identify the staff individuals by name or title that comprise the facility's storm water Pollution Prevention Team. The Pollution Prevention Team is responsible for assisting the facility or plant manager in developing, implementing, maintaining, revising, and ensuring compliance with the facility's SWPPP. Specific responsibilities of each staff individual on the team shall be identified and listed.
   (2) Site Description. The plan shall include the following:
      (a) Activities at the Facility. A description of the nature of the industrial activities at the facility.
      (b) General Location Map. A general location map (e.g., USGS quadrangle or other map) with enough detail to identify the location of the facility and the receiving waters within one mile of the facility.
      (c) Site Map. A site map identifying the following:
         (i) The size of the property (in acres);
         (ii) The location and extent of significant structures and impervious surfaces (roofs, paved areas and other impervious areas);
         (iii) Locations of all storm water conveyances including ditches, pipes, swales, and inlets, and the directions of storm water flow (use arrows to show which ways storm water will flow);
         (iv) Locations of all existing structural and source control BMPs;
         (v) Locations of all surface water bodies, including wetlands;
         (vi) Locations of potential pollutant sources identified under Part I.B.2.b(3);

(vii)Locations where significant spills or leaks identified under Part I.B.2.b(4) have occurred;
(viii)Locations of the following activities where such activities are exposed to precipitation: fueling stations; vehicle and equipment maintenance and/or cleaning areas; loading/unloading areas; locations used for the treatment, storage or disposal of wastes; liquid storage tanks; processing and storage areas; access roads, rail cars and tracks; transfer areas for substances in bulk; and machinery;
(ix) Locations of storm water outfalls and an approximate outline of the area draining to each outfall, and location of municipal storm sewer systems, if the storm water from the facility discharges to them;
(x) Location and description of all non-storm water discharges;
(xi) Location of any storage piles containing salt used for deicing or other commercial or industrial purposes; and
(xii)Locations and sources of runon to the site from adjacent property, where the runon contains significant quantities of pollutants. The permittee shall include an evaluation with the SWPPP of how the quality of the storm water running onto the facility impacts the facility's storm water discharges.

(d) Receiving Waters and Wetlands. The name of all surface waters receiving discharges from the site, including intermittent streams, dry sloughs, and arroyos. Provide a description of wetland sites that may receive discharges from the facility. If the facility discharges through a municipal separate storm sewer system (MS4), identify the MS4 operator, and the receiving water to which the MS4 discharges.

(3) Summary of Potential Pollutant Sources. The plan shall identify each separate area at the facility where industrial materials or activities are exposed to storm water. Industrial materials or activities include, but are not limited to: material handling equipment or activities, industrial machinery, raw materials, industrial production and processes, intermediate products, byproducts, final products, and waste products. Material handling activities include, but are not limited to: the storage, loading and unloading, transportation, disposal, or conveyance of any raw material, intermediate product, final product or waste product. For each separate area identified, the description shall include:
(a) Activities in Area. A list of the activities (e.g., material storage, equipment fueling and cleaning, cutting steel beams); and
(b) Pollutants. A list of the associated pollutant(s) or pollutant constituents (e.g., crankcase oil, zinc, sulfuric acid, cleaning solvents, etc.) for each activity. The pollutant list shall include all significant materials handled, treated, stored or disposed that have been exposed to storm water in the three years prior to the date this SWPPP was prepared or amended. The list shall include any hazardous substances or oil at the facility.

(4) Spills and Leaks. The SWPPP shall clearly identify areas where potential spills and leaks that can contribute pollutants to storm water discharges can occur and their corresponding outfalls. The plan shall include a list of significant spills and leaks of toxic or hazardous pollutants that actually occurred at exposed areas, or that drained to a storm water conveyance during the three-year period prior to the date this SWPPP was prepared or amended. The list shall be updated if significant spills or leaks occur in exposed areas of the facility during the term of the permit. Significant spills and leaks include releases of oil or hazardous substances in excess of reportable quantities, and may also include releases of oil or hazardous substances that are not in excess of reporting requirements.

(5) Sampling Data. The plan shall include a summary of existing storm water discharge sampling data taken at the facility. The summary shall include, at a minimum, any data collected during the previous permit term.

(6) Storm Water Controls

(a) BMPs shall be implemented for all the areas identified in Part I B.2.b(3) (Summary of Potential Pollutant Sources) to prevent or control pollutants in storm water discharges from the facility. All reasonable steps shall be taken to control or address the quality of discharges from the site that may not originate at the facility. The SWPPP shall describe the type, location and implementation of all BMPs for each area where industrial materials or activities are exposed to storm water. Selection of BMPs shall take into consideration:

(i) That preventing storm water from coming into contact with polluting materials is generally more effective, and less costly, than trying to remove pollutants from storm water;

(ii) BMPs generally shall be used in combination with each other for most effective water quality protection;

(iii) Assessing the type and quantity of pollutants, including their potential to impact receiving water quality, is critical to designing effective control measures;

(iv) That minimizing impervious areas at the facility can reduce runoff and improve groundwater recharge and stream base flows in local streams (however, care must be taken to avoid ground water contamination);

(v) Flow attenuation by use of open vegetated swales and natural depressions can reduce in-stream impacts of erosive flows;

(vi) Conservation or restoration of riparian buffers will help protect streams from storm water runoff and improve water quality; and

(vii)Treatment interceptors (e.g., swirl separators and sand filters) may be appropriate in some instances to minimize the discharge of pollutants.

(b) Control Measures. The permittee shall implement the following types of BMPs to prevent and control pollutants in the storm water discharges from the facility, unless it can be demonstrated and documented that such controls are not relevant to the discharges (e.g., there are no storage piles containing salt).

(i) Good Housekeeping. The permittee shall keep clean all exposed areas of the facility that are potential sources of pollutants to storm water discharges. Typical problem areas include areas around trash containers, storage areas, loading docks and vehicle fueling and maintenance areas. The plan shall include a schedule for regular pickup and disposal of waste materials, along with routine inspections for leaks and conditions of drums, tanks and containers. The introduction of raw, final or waste materials to exposed areas of the facility shall be minimized to the maximum extent practicable. The generation of dust, along with off-site vehicle tracking of raw, final or waste materials, or sediments, shall be minimized to the maximum extent practicable.

(ii) Eliminating and Minimizing Exposure. To the extent practicable, industrial materials and activities shall be located inside, or protected by a storm-resistant covering to prevent exposure to rain, snow, snowmelt, and runoff. Note: Eliminating exposure at all industrial areas may make the facility eligible for the "Conditional Exclusion for No Exposure" provision of 9 VAC 25-31-120 E, thereby eliminating the need to have a permit.

(iii) Preventive Maintenance. The permittee shall have a preventive maintenance program that includes regular inspection, testing, maintenance and repairing of all industrial equipment and systems to avoid breakdowns or failures that could result in leaks, spill and other releases. This program is in addition to the specific BMP maintenance required under Part I.B.2.c (Maintenance of BMPs).

(iv) Spill Prevention and Response Procedures. The plan shall describe the procedures that will be followed for preventing and responding to spills and leaks.
(A) Preventive measures include barriers between material storage and traffic areas, secondary containment provisions, and procedures for material storage and handling.
(B) Response procedures shall include notification of appropriate facility personnel, emergency agencies, and regulatory agencies, and procedures for stopping, containing and cleaning up spills. Measures for cleaning up hazardous material spills or leaks shall be consistent with applicable RCRA regulations at 40 CFR Part 264 and 40 CFR Part 265. Employees who may cause, detect or respond to a spill or leak shall be trained in these procedures and have necessary spill response equipment available. If possible, one of these individuals shall be a member of the Pollution Prevention Team.
(C) Contact information for individuals and agencies that must be notified in the event of a spill shall be included in the SWPPP, and in other locations where it will be readily available.

(v) Routine Facility Inspections. Facility personnel who possess the knowledge and skills to assess conditions and activities that could impact storm water quality at the facility, and who can also evaluate the effectiveness of BMPs shall regularly inspect all areas of the facility where industrial materials or activities are exposed to storm water. These inspections are in addition to, or as part of, the comprehensive site evaluation required under Part I.B.2.d. At least one member of the Pollution Prevention Team shall participate in the routine facility inspections.

The inspection frequency shall be specified in the plan based upon a consideration of the level of industrial activity at the facility, but shall be a minimum of quarterly unless more frequent intervals are specified elsewhere in the permit or written approval is received from the Department for less frequent intervals. At least once each calendar year, the routine facility inspection must be conducted during a period when a storm water discharge is occurring.

Any deficiencies in the implementation of the SWPPP that are found shall be corrected as soon as practicable, but not later than within 30 days of the inspection, unless permission for a later date is granted in writing by the Director. The results of the inspections shall be documented in the SWPPP, along with the date(s) and description(s) of any corrective actions that were taken in response to any deficiencies or opportunities for improvement that were identified.

(vi) Employee Training. The permittee shall implement a storm water employee training program for the facility. The SWPPP shall include a schedule for all types of necessary training, and shall document all training sessions and the employees who received the training. Training shall be provided for all employees who work in areas where industrial materials or activities are exposed to storm water, and for employees who are responsible for implementing activities identified in the SWPPP (e.g., inspectors, maintenance personnel, etc.). The training shall cover the components and goals of the SWPPP, and include such topics as spill response, good housekeeping, material management practices, BMP operation and maintenance, etc. The SWPPP shall include a summary of any training performed.

(vii) Sediment and Erosion Control. The plan shall identify areas at the facility that, due to topography, land disturbance (e.g., construction, landscaping, site grading), or other factors, have a potential for soil erosion. The permittee shall identify and implement structural, vegetative, and/or stabilization BMPs to prevent or control on-site and off-site erosion and sedimentation. Flow velocity dissipation devices shall be placed at discharge locations and along the length of any outfall channel if the flows would otherwise create erosive conditions.

(viii)Management of Runoff. The plan shall describe the storm water runoff management practices (i.e., permanent structural BMPs) for the facility. These types of BMPs are typically used to divert, infiltrate, reuse, or otherwise reduce pollutants in storm water discharges from the site. Structural BMPs may require a separate permit under § 404 of the CWA and the Virginia Water Protection Permit Program Regulation (9 VAC 25-210) before installation begins.

c. Maintenance

All BMPs identified in the SWPPP shall be maintained in effective operating condition. Storm water BMPs identified in the SWPPP shall be observed during active operation (i.e., during a storm water runoff event) to ensure that they are functioning correctly. Where discharge locations are inaccessible, nearby downstream locations shall be observed. The observations shall be documented in the SWPPP.

The SWPPP shall include a description of procedures and a regular schedule for preventive maintenance of all BMPs, and shall include a description of the back-up practices that are in place should a runoff event occur while a BMP is off-line. The effectiveness of nonstructural BMPs shall also be maintained by appropriate means (e.g., spill response supplies available and personnel trained, etc.).

If site inspections required by Part I.B.2.b(6)(b)(v) (Routine Facility Inspections) or Part I.B.2.d (Comprehensive Site Compliance Evaluation) identify BMPs that are not operating effectively, repairs or maintenance shall be performed before the next anticipated storm event. If maintenance prior to the next anticipated storm event is not possible, maintenance shall be scheduled and accomplished as soon as practicable. In the interim, back-up measures shall be employed and documented in the SWPPP until repairs or maintenance is complete. Documentation shall be kept with the SWPPP of maintenance and repairs of BMPs, including the date(s) of regular maintenance, date(s) of discovery of areas in need of repair or replacement, and for repairs, date(s) that the BMP(s) returned to full function, and the justification for any extended maintenance or repair schedules.

d. Comprehensive Site Compliance Evaluation

The permittee shall conduct comprehensive site compliance evaluations at least once a year. The evaluations shall be done by qualified personnel who possess the knowledge and skills to assess conditions and activities that could impact storm water quality at the facility, and who can also evaluate the effectiveness of BMPs. The personnel conducting the evaluations may be either facility employees or outside constituents hired by the facility.

(1) Scope of the Compliance Evaluation. Evaluations shall include all areas where industrial materials or activities are exposed to storm water, as identified in Part I.B.2.b(3). The personnel shall evaluate:
   (a) Industrial materials, residue or trash that may have or could come into contact with storm water;
   (b) Leaks or spills from industrial equipment, drums, barrels, tanks or other containers that have occurred within the past three years;
   (c) Off-site tracking of industrial or waste materials or sediment where vehicles enter or exit the site;
   (d) Tracking or blowing of raw, final, or waste materials from areas of no exposure to exposed areas;
   (e) Evidence of, or the potential for, pollutants entering the drainage system;
   (f) Evidence of pollutants discharging to surface waters at all facility outfalls, and the condition of and around the outfall, including flow dissipation measures to prevent scouring;

(g) Review of training performed, inspections completed, maintenance performed, quarterly visual examinations, and effective operation of BMPs;
(h) Results of both visual and any analytical monitoring done during the past year shall be taken into consideration during the evaluation.

(2) Based on the results of the evaluation, the SWPPP shall be modified as necessary (e.g., show additional controls on the map required by Part I.B.2.b(2)(c); revise the description of controls required by Part I.B.2.b(6) to include additional or modified BMPs designed to correct problems identified). Revisions to the SWPPP shall be completed within 30 days following the evaluation, unless permission for a later date is granted in writing by the Director. If existing BMPs need to be modified or if additional BMPs are necessary, implementation shall be completed before the next anticipated storm event, if practicable, but not more than 60 days after completion of the comprehensive site evaluation, unless permission for a later date is granted in writing by the Department;

(3) Compliance Evaluation Report. A report shall be written summarizing the scope of the evaluation, name(s) of personnel making the evaluation, the date of the evaluation, and all observations relating to the implementation of the SWPPP, including elements stipulated in Part I.B.2.d(1) (a) through (f) above. Observations shall include such things as: the location(s) of discharges of pollutants from the site; location(s) of previously unidentified sources of pollutants; location(s) of BMPs that need to be maintained or repaired; location(s) of failed BMPs that need replacement; and location(s) where additional BMPs are needed. The report shall identify any incidents of noncompliance that were observed. Where a report does not identify any incidents of noncompliance, the report shall contain a certification that the facility is in compliance with the SWPPP and this permit. The report shall be signed in accordance with Part II.K and maintained with the SWPPP.

(4) Where compliance evaluation schedules overlap with routine inspections required under Part I.B.2.b(6)(b)(v), the annual compliance evaluation may be used as one of the routine inspections.

e. Signature and Plan Review

(1) Signature/Location. The SWPPP shall be signed in accordance with Part II.K, dated, and retained on-site at the facility covered by this permit in accordance with Part II.B.2. All other changes to the SWPPP, and other permit compliance documentation, must be signed and dated by the person preparing the change or documentation.

(2) Availability. The permittee shall make the SWPPP, annual site compliance evaluation report, and other information available to the Department upon request.

(3) Required Modifications. The Director may notify the permittee at any time that the SWPPP, BMPs, or other components of the facility's storm water program do not meet one or more of the requirements of this permit. The notification shall identify specific provisions of the permit that are not being met, and may include required modifications to the storm water program, additional monitoring requirements, and special reporting requirements. The permittee shall make any required changes to the SWPPP within 60 days of receipt of such notification, unless permission for a later date is granted in writing by the Director, and shall submit a written certification to the Director that the requested changes have been made.

f. Maintaining an Updated SWPPP

(1) The permittee shall review and amend the SWPPP as appropriate whenever:
   (a) There is construction or a change in design, operation, or maintenance at the facility that has a significant effect on the discharge, or the potential for the discharge, of pollutants from the facility;
   (b) Routine inspections or compliance evaluations determine that there are deficiencies in the BMPs;
   (c) Inspections by local, state, or federal officials determine that modifications to the SWPPP are necessary;
   (d) There is a spill, leak or other release at the facility; or
   (e) There is an unauthorized discharge from the facility.

(2) SWPPP modifications shall be made within 30 calendar days after discovery, observation or event requiring a SWPPP modification. Implementation of new or modified BMPs (distinct from regular preventive maintenance of existing BMPs described in Part I.B.2.b(6)(b)(iii)) shall be initiated before the next storm event if possible, but no later than 60 days after discovery, or as otherwise provided or approved by the Director. The amount of time taken to modify a BMP or implement additional BMPs shall be documented in the SWPPP.

(3) If the SWPPP modification is based on a release or unauthorized discharge, include a description and date of the release, the circumstances leading to the release, actions taken in response to the release, and measures to prevent the recurrence of such releases. Unauthorized releases and discharges are subject to the reporting requirements of Part II.G of this permit.

3. Sector-Specific SWPPP Requirements --

In addition to the requirements of Part I.B.2, the SWPPP shall include, at a minimum, the following items:

a. Site Description.

(1) Site Map. The site map shall identify the locations of the following activities if they are exposed to precipitation/surface runoff: vents/stacks from cooking, drying, and similar operations; dry product vacuum transfer lines; animal holding pens; spoiled product; and broken product container storage areas.

(2) Summary of Potential Pollutant Sources. In addition to food and kindred products processing-related industrial activities, the plan shall also describe application and storage of pest control chemicals (e.g., rodenticides, insecticides, fungicides, etc.) used on plant grounds.

b. Storm Water Controls.

(1) Routine Facility Inspections. At a minimum, the following areas, where the potential for exposure to storm water exists, shall be inspected on a monthly basis: loading and unloading areas for all significant materials; storage areas, including associated containment areas; waste management units; vents and stacks emanating from industrial activities; spoiled product and broken product container holding areas; animal holding pens; staging areas; and air pollution control equipment.

(2) Employee Training. The employee training program shall also address pest control.

DEPARTMENT OF ENVIRONMENTAL QUALITY
WATER QUALITY MONITORING

OUTFALL NO. 001

CASRN#	CHEMICAL	EPA ANALYSIS NO.	QUANTIFICATION LEVEL [1]	REPORTING RESULTS	SAMPLE TYPE [2]	SAMPLE FREQUENCY
PESTICIDES/PCBS						
333-41-5	Diazinon	(3)	(4)		G or C	1/5 YR
RADIONUCLIDES						
	Combined Radium 226 and 228 (pCi/L)	(3)	(4)		G or C	1/5 YR
	Uranium	(3)	(4)		G or C	1/5 YR
ACID EXTRACTABLES [5]						
104-40-51	Nonylphenol	(3)	(4)		G or C	1/5 YR

Name of Principal Exec. Officer or Authorized Agent/Title

Signature of Principal Officer or Authorized Agent/Date

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information including the possibility of fine and imprisonment for knowing violations. See 18 U.S.C. Sec. 1001 and 33 U.S.C. Sec. 1319. (Penalties under these statutes may include fines up to $10,000 and or maximum imprisonment of between 6 months and 5 years.)

Footnotes to Water Quality Monitoring Attachment A

(1) Quantification level (QL) is defined as the lowest concentration used for the calibration of a measurement system when the calibration is in accordance with the procedures published for the required method.

The quantification levels indicated for the metals are actually Specific Target Values developed for this permit. The Specific Target Value is the approximate value that may initiate a wasteload allocation analysis. Target values are not wasteload allocations or effluent limitations. The Specific Target Values are subject to change based on additional information such as hardness data, receiving stream flow, and design flows.

Units for the quantification level are micrograms/liter unless otherwise specified.

Quality control and quality assurance information shall be submitted to document that the required quantification level has been attained.

(2) Sample Type

G = Grab = An individual sample collected in less than 15 minutes. Substances specified with "grab" sample type shall only be collected as grabs. The permittee may analyze multiple grabs and report the average results provided that the individual grab results are also reported. For grab metals samples, the individual samples shall be filtered and preserved immediately upon collection.

C = Composite = A 24-hour composite unless otherwise specified. The composite shall be a combination of individual samples, taken proportional to flow, obtained at hourly or smaller time intervals. The individual samples may be of equal volume for flows that do not vary by +/- 10 percent over a 24-hour period.

(3) Any approved method presented in 40 CFR Part 136.

(4) The QL is at the discretion of the permittee. For any substances addressed in 40 CFR Part 136, the permittee shall use one of the approved methods in 40 CFR Part 136.

(5) Testing for phenols requires continuous extraction.

CONDITIONS APPLICABLE TO ALL VPDES PERMITS

A. Monitoring

1. Samples and measurements taken as required by this permit shall be representative of the monitored activity.

2. Monitoring shall be conducted according to procedures approved under Title 40 Code of Federal Regulations Part 136 or alternative methods approved by the U.S. Environmental Protection Agency, unless other procedures have been specified in this permit.

3. The permittee shall periodically calibrate and perform maintenance procedures on all monitoring and analytical instrumentation at intervals that will insure accuracy of measurements.

B. Records

1. Records of monitoring information shall include:
   a. The date, exact place, and time of sampling or measurements;
   b. The individual(s) who performed the sampling or measurements;
   c. The date(s) and time(s) analyses were performed;
   d. The individual(s) who performed the analyses;
   e. The analytical techniques or methods used; and
   f. The results of such analyses.

2. Except for records of monitoring information required by this permit related to the permittee's sewage sludge use and disposal activities, which shall be retained for a period of at least five years, the permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit, for a period of at least 3 years from the date of the sample, measurement, report or application. This period of retention shall be extended automatically during the course of any unresolved litigation regarding the regulated activity or regarding control standards applicable to the permittee, or as requested by the Board.

C. Reporting Monitoring Results

1. The permittee shall submit the results of the monitoring required by this permit not later than the 10th day of the month after monitoring takes place, unless another reporting schedule is specified elsewhere in this permit. Monitoring results shall be submitted to:

   Department of Environmental Quality
   Valley Regional Office
   P.O. Box 3000
   Harrisonburg, Virginia 22801

2. Monitoring results shall be reported on a Discharge Monitoring Report (DMR) or on forms provided, approved or specified by the Department.

3. If the permittee monitors any pollutant specifically addressed by this permit more frequently than required by this permit using test procedures approved under Title 40 of the Code of Federal Regulations Part 136 or using other test procedures approved by the U.S. Environmental Protection Agency or using procedures specified in this permit, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the DMR or reporting form specified by the Department.

4. Calculations for all limitations which require averaging of measurements shall utilize an arithmetic mean unless otherwise specified in this permit.

D. Duty to Provide Information

The permittee shall furnish to the Department, within a reasonable time, any information which the Board may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit or to determine compliance with this permit. The Board may require the permittee to furnish, upon request, such plans, specifications, and other pertinent information as may be necessary to determine the effect of the wastes from his discharge on the quality of State waters, or such other information as may be necessary to accomplish the purposes of the State Water Control Law. The permittee shall also furnish to the Department upon request, copies of records required to be kept by this permit.

E. Compliance Schedule Reports

Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this permit shall be submitted no later than 14 days following each schedule date.

F. Unauthorized Discharges

Except in compliance with this permit, or another permit issued by the Board, it shall be unlawful for any person to:

1. Discharge into State waters sewage, industrial wastes, other wastes, or any noxious or deleterious substances; or

2. Otherwise alter the physical, chemical or biological properties of such State waters and make them detrimental to the public health, or to animal or aquatic life, or to the use of such waters for domestic or industrial consumption, or for recreation, or for other uses.

G. Reports of Unauthorized Discharges

Any permittee who discharges or causes or allows a discharge of sewage, industrial waste, other wastes or any noxious or deleterious substance into or upon State waters in violation of Part II.F.; or who discharges or causes or allows a discharge that may reasonably be expected to enter State waters in violation of Part II.F., shall notify the Department of the discharge immediately upon discovery of the discharge, but in no case later than 24 hours after said discovery. A written report of the unauthorized discharge shall be submitted to the Department, within five days of discovery of the discharge. The written report shall contain:

1. A description of the nature and location of the discharge;
2. The cause of the discharge;
3. The date on which the discharge occurred;
4. The length of time that the discharge continued;
5. The volume of the discharge;
6. If the discharge is continuing, how long it is expected to continue;
7. If the discharge is continuing, what the expected total volume of the discharge will be; and
8. Any steps planned or taken to reduce, eliminate and prevent a recurrence of the present discharge or any future discharges not authorized by this permit.

Discharges reportable to the Department under the immediate reporting requirements of other regulations are exempted from this requirement.

H. Reports of Unusual or Extraordinary Discharges

If any unusual or extraordinary discharge including a bypass or upset should occur from a treatment works and the discharge enters or could be expected to enter State waters, the permittee shall promptly notify, in no case later than 24 hours, the Department by telephone after the discovery of the discharge. This notification shall provide all available details of the incident, including any adverse affects on aquatic life and the known number of fish killed. The permittee shall reduce the report to writing and shall submit it to the Department within five days of discovery of the discharge in accordance with Part II.I.2. Unusual and extraordinary discharges include but are not limited to any discharge resulting from:

1. Unusual spillage of materials resulting directly or indirectly from processing operations;
2. Breakdown of processing or accessory equipment;
3. Failure or taking out of service some or all of the treatment works; and
4. Flooding or other acts of nature.

I. Reports of Noncompliance

The permittee shall report any noncompliance which may adversely affect State waters or may endanger public health.

1. An oral report shall be provided within 24 hours from the time the permittee becomes aware of the circumstances. The following shall be included as information which shall be reported within 24 hours under this paragraph:

   a. Any unanticipated bypass; and
   b. Any upset which causes a discharge to surface waters.

2. A written report shall be submitted within 5 days and shall contain:

   a. A description of the noncompliance and its cause;
   b. The period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and
   c. Steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.

   The Board may waive the written report on a case-by-case basis for reports of noncompliance under Part II.I. if the oral report has been received within 24 hours and no adverse impact on State waters has been reported.

3. The permittee shall report all instances of noncompliance not reported under Parts II.I.1. or 2., in writing, at the time the next monitoring reports are submitted. The reports shall contain the information listed in Part II.I.2.

NOTE: The immediate (within 24 hours) reports required in Parts II.G, H, and I may be made to the Department's Valley Regional Office at (540) 574-7800 (voice) or (540) 574-7878 (fax). For reports outside normal working hours, leave a message and this shall fulfill the immediate reporting requirement. For emergencies, the Virginia Department of Emergency Services maintains a 24-hour telephone service at 1-800-468-8892.

J. Notice of Planned Changes

1. The permittee shall give notice to the Department as soon as possible of any planned physical alterations or additions to the permitted facility. Notice is required only when:

   a. The permittee plans alteration or addition to any building, structure, facility, or installation from which there is or may be a discharge of pollutants, the construction of which commenced:
      (1) After promulgation of standards of performance under Section 306 of the Clean Water Act which are applicable to such source; or
      (2) After proposal of standards of performance in accordance with Section 306 of the Clean Water Act which are applicable to such source, but only if the standards are promulgated in accordance with Section 306 within 120 days of their proposal;
   b. The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants which are subject neither to effluent limitations nor to notification requirements specified elsewhere in this permit; or
   c. The alteration or addition results in a significant change in the permittee's sludge use or disposal practices, and such alteration, addition, or change may justify the application of permit conditions that are different from or absent in the existing permit, including notification of additional use or disposal sites not reported during the permit application process or not reported pursuant to an approved land application plan.

2. The permittee shall give advance notice to the Department of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements.

K. Signatory Requirements

1. Applications. All permit applications shall be signed as follows:

   a. For a corporation: by a responsible corporate officer. For the purpose of this section, a responsible corporate officer means: (i) A president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy- or decision-making functions for the corporation, or (ii) the manager of one or more manufacturing, production, or operating facilities, provided the manager is authorized to make management decisions which govern the operation of the regulated facility including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long term environmental compliance with environmental laws and regulations; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures;
   b. For a partnership or sole proprietorship: by a general partner or the proprietor, respectively; or
   c. For a municipality, State, Federal, or other public agency: By either a principal executive officer or ranking elected official. For purposes of this section, a principal executive officer of a public agency includes: (i) The chief executive officer of the agency, or (ii) a senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency.

2. Reports, etc. All reports required by permits, and other information requested by the Board shall be signed by a person described in Part II.K.1., or by a duly authorized representative of that person. A person is a duly authorized representative only if:

   a. The authorization is made in writing by a person described in Part II.K.1.;
   b. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity such as the position of plant manager, operator of a well or a well field, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters for the company. (A duly authorized representative may thus be either a named individual or any individual occupying a named position.); and
   c. The written authorization is submitted to the Department.

3. Changes to authorization. If an authorization under Part II.K.2. is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of Part II.K.2. shall be submitted to the Department prior to or together with any reports, or information to be signed by an authorized representative.

4. Certification. Any person signing a document under Parts II.K.1. or 2. shall make the following certification: "I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

L. Duty to Comply

The permittee shall comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the State Water Control Law and the Clean Water Act, except that noncompliance with certain provisions of this permit may constitute a violation of the State Water Control Law but not the Clean Water Act. Permit noncompliance is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or denial of a permit renewal application. The permittee shall comply with effluent standards or prohibitions established under Section 307(a) of the Clean Water Act for toxic pollutants and with standards for sewage sludge use or disposal established under Section 405(d) of the Clean Water Act within the time provided in the regulations that establish these standards or prohibitions or standards for sewage sludge use or disposal, even if this permit has not yet been modified to incorporate the requirement.

M. Duty to Reapply

If the permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the permittee shall apply for and obtain a new permit. All permittees with a currently effective permit shall submit a new application at least 180 days before the expiration date of the existing permit, unless permission for a later date has been granted by the Board. The Board shall not grant permission for applications to be submitted later than the expiration date of the existing permit.

N. Effect of a Permit

This permit does not convey any property rights in either real or personal property or any exclusive privileges, nor does it authorize any injury to private property or invasion of personal rights, or any infringement of Federal, State or local law or regulations.

O. State Law

Nothing in this permit shall be construed to preclude the institution of any legal action under, or relieve the permittee from any responsibilities, liabilities, or penalties established pursuant to any other State law or regulation or under authority preserved by Section 510 of the Clean Water Act. Except as provided in permit conditions on "bypassing" (Part II.U.), and "upset" (Part II.V.) nothing in this permit shall be construed to relieve the permittee from civil and criminal penalties for noncompliance.

P. Oil and Hazardous Substance Liability

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties to which the permittee is or may be subject under Sections 62.1-44.34:14 through 62.1-44.34:23 of the State Water Control Law.

Q. Proper Operation and Maintenance

The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance also includes effective plant performance, adequate funding, adequate staffing, and adequate laboratory and process controls, including appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems which are installed by the permittee only when the operation is necessary to achieve compliance with the conditions of this permit.

R. Disposal of Solids or Sludges

Solids, sludges or other pollutants removed in the course of treatment or management of pollutants shall be disposed of in a manner so as to prevent any pollutant from such materials from entering State waters.

S. Duty to Mitigate

The permittee shall take all reasonable steps to minimize or prevent any discharge or sludge use or disposal in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment.

T. Need to Halt or Reduce Activity not a Defense

It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

U. Bypass

1. "Bypass" means the intentional diversion of waste streams from any portion of a treatment facility. The permittee may allow any bypass to occur which does not cause effluent limitations to be exceeded, but only if it also is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions of Parts II.U.2. and U.3.

2. Notice

   a. Anticipated bypass. If the permittee knows in advance of the need for a bypass, prior notice shall be submitted, if possible at least ten days before the date of the bypass.
   b. Unanticipated bypass. The permittee shall submit notice of an unanticipated bypass as required in Part II.I.

3. Prohibition of bypass

   a. Bypass is prohibited, and the Board may take enforcement action against a permittee for bypass, unless:
      (1) Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;
      (2) There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance; and
      (3) The permittee submitted notices as required under Part II.U.2.
   b. The Board may approve an anticipated bypass, after considering its adverse effects, if the Board determines that it will meet the three conditions listed above in Part II.U.3.a.

V. Upset

1. An upset constitutes an affirmative defense to an action brought for noncompliance with technology based permit effluent limitations if the requirements of Part II.V.2. are met. A determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is not a final administrative action subject to judicial review.

2. A permittee who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that:

   a. An upset occurred and that the permittee can identify the cause(s) of the upset;
   b. The permitted facility was at the time being properly operated;
   c. The permittee submitted notice of the upset as required in Part II.I.; and
   d. The permittee complied with any remedial measures required under Part II.S.

3. In any enforcement proceeding the permittee seeking to establish the occurrence of an upset has the burden of proof.

W. Inspection and Entry

The permittee shall allow the Director, or an authorized representative, upon presentation of credentials and other documents as may be required by law, to:

1. Enter upon the permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this permit;

2. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;

3. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and

4. Sample or monitor at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by the Clean Water Act and the State Water Control Law, any substances or parameters at any location.

For purposes of this section, the time for inspection shall be deemed reasonable during regular business hours, and whenever the facility is discharging. Nothing contained herein shall make an inspection unreasonable during an emergency.

X. Permit Actions

Permits may be modified, revoked and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any permit condition.

Y. Transfer of Permits

1. Permits are not transferable to any person except after notice to the Department. Except as provided in Part II.Y.2, a permit may be transferred by the permittee to a new owner or operator only if the permit has been modified or revoked and reissued, or a minor modification made, to identify the new permittee and incorporate such other requirements as may be necessary under the State Water Control Law and the Clean Water Act.

2. As an alternative to transfers under Part II.Y.1., this permit may be automatically transferred to a new permittee if:

   a. The current permittee notifies the Department at least 30 days in advance of the proposed transfer of the title to the facility or property;
   b. The notice includes a written agreement between the existing and new permittees containing a specific date for transfer of permit responsibility, coverage, and liability between them; and
   c. The Board does not notify the existing permittee and the proposed new permittee of its intent to modify or revoke and reissue the permit. If this notice is not received, the transfer is effective on the date specified in the agreement mentioned in Part II.Y.2.b.

Z. Severability

The provisions of this permit are severable, and if any provision of this permit or the application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected there

VPDES PERMIT FACT SHEET

This document gives pertinent information concerning the reissuance of the VPDES permit listed below. This permit is being processed as a Minor, Industrial permit. The effluent limitations contained in this permit will maintain the Water Quality Standards (WQS) of 9 VAC 25-260. The discharge results from the treatment of poultry processing wastewater and sanitary wastewater generated within the poultry processing facility. This permit action consists of reissuing the permit with revisions to the permit, as needed, due to changes in applicable laws, guidance, and available technical information.

1. Facility Name and Address:
   Virginia Poultry Growers Cooperative-Hinton
   PO Box 228
   Hinton, VA 22831
   Location: 6349 Rawley Pike, Hinton
   SIC Code: 2015 - Poultry Slaughtering and Processing

2. Permit No. VA0002313 Expiration Date: November 30, 2009

3. Owner Contact: Name: Ronald Harrison
   Title: Environmental Manager
   Telephone No: (540) 867-4366

4. Application Complete Date: June 12, 2009
   Permit Drafted By: Brandon D. Kiracofe Date: October 2, 2009
   Reviewed By: Date:

   Public Comment Period: _____ to _____

5. Annual Permit Maintenance Fee per 9 VAC 25-20-142: $3040
   VPDES Industrial Minor / No Standard Limits TMP? Yes > 5 outfalls? No

6. Receiving Stream Name: Muddy Creek River Mile: 3.7
   Basin: Potomac Subbasin: Shenandoah
   Section: 5 Class: IV
   Special Standards: pH Impaired: ☑ Yes ☐ No
   Watershed Name: VAV-B22R – Muddy Creek Tidal Waters: ☑ Yes ☐ No

7. Operator License Requirements per 9 VAC 25-31-200.C: II

8. Reliability Class per 9 VAC 25-790 (sewage treatment works): II (assigned July 23, 2002)

9. Permit Characterization:

   ☑ Private ☐ Federal ☐ State ☐ POTW ☐ PVOTW
   ☐ Possible Interstate Effect ☐ Interim Limits in Other Document (attach copy of CSO)

10. Description of Wastewater Treatment System: **Appendix A**

    Total Number of Outfalls = 3

    Operation and Maintenance (O&M) Manual: Approved June 24, 1994

11. Discharge Location Description and Receiving Waters Information: **Appendix B**

    Topo Map Name: Bridgewater Topo Map Number: 188B

Introduction

12. Antidegradation Review & Comments per 9 VAC 25-260-30: Tier: 1

    The State Water Control Board's Water Quality Standards (WQS) includes an antidegradation policy. All state surface waters are provided one of three levels of antidegradation protection. For Tier 1 or existing use protection, existing uses of the water body and the water quality to protect these uses must be maintained. Tier 2 water bodies have water quality that is better than the water quality standards. Significant lowering of the water quality of Tier 2 waters is not allowed without an evaluation of the economic and social impacts. Tier 3 water bodies are exceptional waters and are so designated by regulatory amendment. The antidegradation policy prohibits new or expanded discharges into exceptional waters.

    The antidegradation review begins with a Tier determination. Muddy Creek in the vicinity of the discharge is determined to be a Tier 1 waterbody. This determination is based on the fact that this facility discharges to a segment of Muddy Creek that is listed as impaired for Benthics and Nitrate. Antidegradation baselines are not calculated for Tier 1 waterbodies.

13. Site Inspection: Performed by: Brandon Kiracofe Date: June 3, 2009

14. Effluent Screening and Effluent Limitations: **Appendix C**

15. Rationale for Toxics Management Program (TMP) Requirements: **Appendix D**

16. Management of Sludge:
    Sewage sludge from this facility is hauled to North River WWTF for further treatment and disposal.
    Industrial sludge from this facility is hauled to Valley Proteins-Linville for rendering.

17. Permit Changes and Bases for Special Conditions: **Appendix E**

18. Material Storage per 9 VAC 25-31-280.B.2: This permit requires that the facility's O&M Manual include information to address the management of wastes, fluids, and pollutants which may be present at the facility, to avoid unauthorized discharge of such materials.

19. Antibacksliding Review per 9 VAC 25-31-220.L: Less stringent Ammonia-N were included at this reissuance based on additional information for effluent pH, effluent temperature, and stream flow. Less stringent WET limits were included at this reissuance based on additional information for stream flow. This permit complies with Antibacksliding provisions of the VPDES Permit Regulation.

20. Impaired Use Status Evaluation per 9 VAC 25-31-220.D: This facility discharges directly to Muddy Crrek. The stream segment receiving the effluent is listed as impaired for Bacteria, Benthics, and Nitrate. Three separate TMDLs have been developed and approved for the stream segment receiving the effluent. See Appendix C for a discussion regarding how this permit meets the TMDL requirements.

21. Regulation of Users per 9 VAC 25-31-280.B.9: N/A – There are no industrial users associated with this facility other than the owner.

Introduction

22. Storm Water Management per 9 VAC 25-31-120: Application Required? ☑ Yes ☐ No

Two separate situations must be considered when addressing storm water at this facility. The permit application describes the situations as "reasonable storm events" and "unreasonable storm events". The only description of an unreasonable storm event that is provided is that it would be a large rain in a short period of time.

Reasonable Storm Event
During a reasonable storm event, all storm water associated with industrial activity is collected, combined with the process wastewater, and treated before being discharged through Outfall 001. The total area collected, treated, and discharged through Outfall 001 includes the area for Outfall 001 (231,933 sq. ft.) and Outfall 003 (47,692 sq.ft.) During a normal rainfall event, Outfall 002 only receives storm water from an employee parking lot at the facility. No industrial activity takes place on the 381,267 sq. ft. that drains to Outfall 002.

Unreasonable Storm Event
During an unreasonable storm event, the storm water from the 231,933 sq. ft. area that is indicated for Outfall 001 will overflow a collection pit and flow towards Outfall 002 where it will combine with the parking lot run off before discharging through Outfall 002. The applicant has indicated that the storm water from the 231,933 sq. ft. area that is indicated for Outfall 001 has overflowed and discharged through Outfall 002 once or twice in the past five years resulting from a rainfall of four inches or more in a short period of time. During an unreasonable storm event, a valve in a collection tank is opened allowing the storm water from the loading dock area to discharge through Outfall 003. The applicant has indicated that Outfall 003 has discharged once or twice in the past five years resulting from a rainfall of four inches or more in a short period of time.

23. Compliance Schedules per 9 VAC 25-31-250: None required by this draft permit.

24. Variances/Alternative Limits or Conditions per 9 VAC 25-31-280.B, 100.J, 100.P, and 100.L: The permittee has requested waivers from sampling and reporting COD, TOC, and surfactants as part of the application. The waiver requests have been approved based on the justification provided by the permittee.

25. Financial Assurance Evaluation per 9 VAC 25-650-10: N/A – This is an industrial facility that does not serve private residences.

26. Nutrient Trading Regulation per 9 VAC 25-820:
Watershed General Permit (WGP) Required: ☑ Yes ☐ No
If Yes: Permit No.: VAN010009
Date General Permit Effective: January 1, 2007

27. Threatened and Endangered (T&E) Species Screening per 9 VAC 25-260-20 B.8: Because this is not an issuance or reissuance that allows increased discharge flows, T&E screening is not required.

28. Virginia Environmental Excellence Program (VEEP) Evaluation per § 10.1-1187.1-7: Is this facility considered by DEQ to be a participant in the Virginia Environmental Excellence Program in good standing at either the Exemplary Environmental Enterprise (E3) level or the Extraordinary Environmental Enterprise (E4) level? ☐ Yes ☑ No

29. Public Notice Information per 9 VAC 25-31-290: All pertinent information is on file, and may be inspected and copied by contacting Brandon Kiracofe at: DEQ-Valley Regional Office, P.O. Box 3000, Harrisonburg, Virginia 22801, Telephone No. (540) 574-7892, brandon.kiracofe@deq.virginia.gov.

    Persons may comment in writing or by email to the DEQ on the proposed permit action, and may request a public hearing, during the comment period. Comments shall include the name, address, and telephone number of the writer, and shall contain a complete, concise statement of the factual basis for comments. Only those comments received within this period will be considered. The DEQ may decide to hold a public hearing if public response is significant. Requests for public hearings shall state the reason why a hearing is requested, the nature of the issues proposed to be raised in the public hearing and a brief explanation of how the requester's interests would be directly and adversely affected by the proposed permit action. Following the comment period, the Board will make a determination regarding the proposed permit action. This determination will become effective, unless the DEQ grants a public hearing. Due notice of any public hearing will be given.

30. Historical Record

- The processing plant began operating in 1946.
- In May 1962, the daily discharge flow was stated to be 0.1 MGD.
- All domestic sewage from the plant was directed into a septic tank/drainfield system.
- Treatment of poultry processing wastewater began on September 1, 1963 (treatment consisted of a grease trap and a settling tank.)
- The wastewater treatment facilities were upgraded in 1971. Upgraded facilities included settling, re-circulating trickling filtration, post aeration, and disinfection using chlorination.
- An air flotation unit and chemical coagulation equipment were added in 1973.
- A submerged aeration system following the tricking filter was added during the summer of 1974.
- An upgraded facility with a design flow of 0.262 MGD was proposed in 1975.
- As of 1991, the industrial treatment facilities consisted of fine screening, chemically assisted DAF, flow equalization, extended aeration, activated sludge biological treatment, and clarification. The design flow of industrial treatment facilities was 0.52 MGD. Sanitary wastes were discharged to a separate package plant for treatment. The design flow of the sanitary package plant was 0.02 MGD. The effluent from both the sanitary and industrial treatment facilities were combined, chlorinated, and dechlorinated prior to discharge. The chlorination and dechlorination facilities were designed to treat 0.54 MGD.
- Plans & Specifications for a new 0.020 MGD sewage treatment facility were approved on July 23, 2002.
- A CER for a 1.5 MGD wastewater treatment facility was approved on July 24, 2002.
- The plant upgrade was completed in October 2002.

APPENDIX A

DESCRIPTION OF TREATMENT WORKS

Outfall 001

Operations Contributing Wastewater:

Poultry processing wastewater and sanitary wastewater are generated within the poultry processing facility.

Treatment Works Description (Unit by unit):

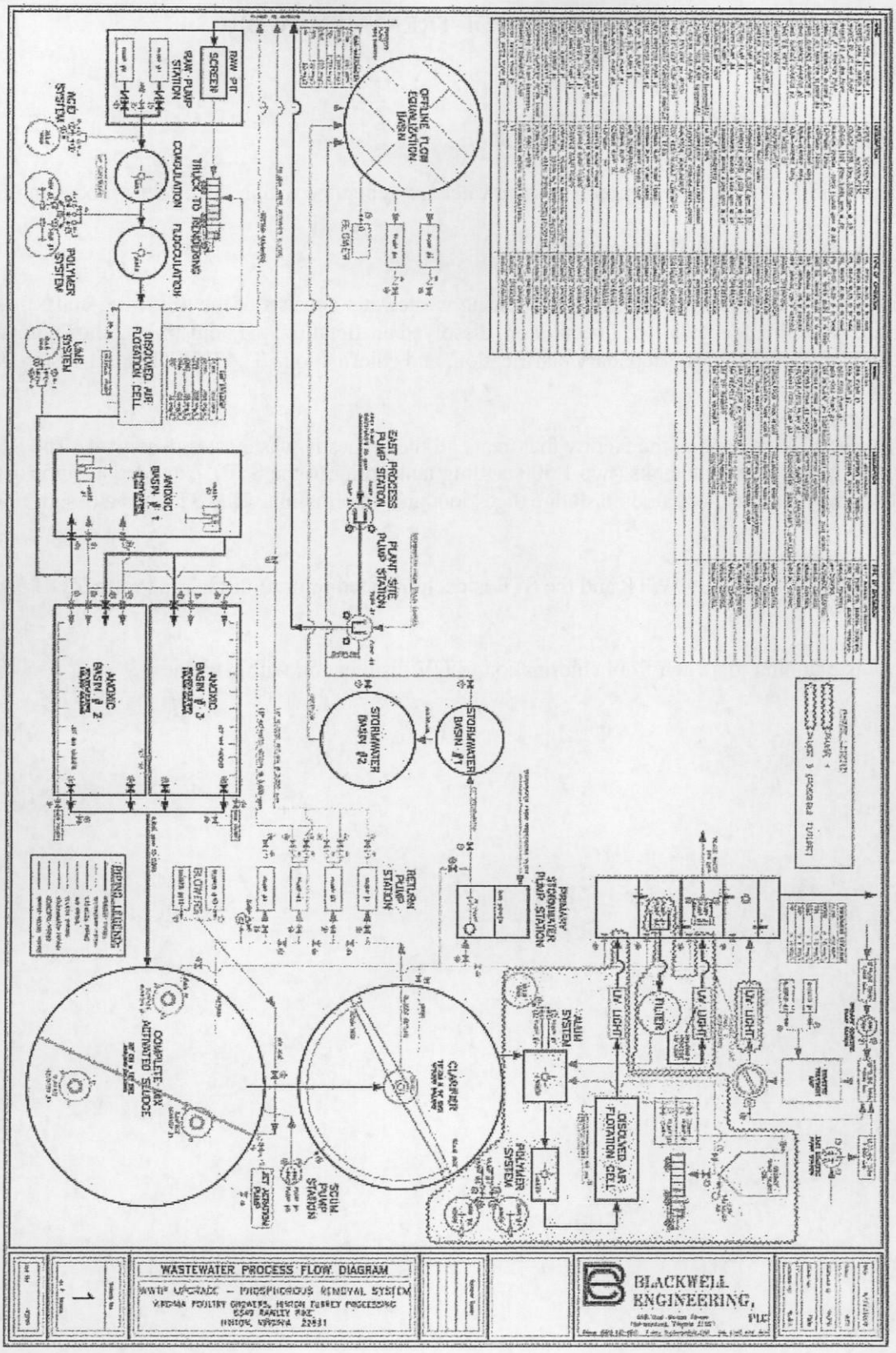
The Industrial WWTP treating the poultry processing wastewater consists of the following units: flow equalization, screening, coagulation, flocculation, dissolved air flotation, pH adjustment, anoxic treatment, complete mix activated sludge, secondary clarification, and chlorination. The WWTP has a design flow of 1.5 MGD.

There is also a package plant at the facility that treats all the domestic wastewater generated. The STP consists of the following units: settling tanks (two 1,500 settling tanks prior to the STP), extended aeration activated sludge, secondary clarification, aerobic sludge digestion, and chlorination. The STP has a design flow of 0.02 MGD.

The combined flow from the WWTP and the STP is dechlorinated prior to discharge to Muddy Creek through Outfall 001.

The facility is planning to switch from chlorination to UV disinfection within the next year.

Flow Schematic



APPENDIX B

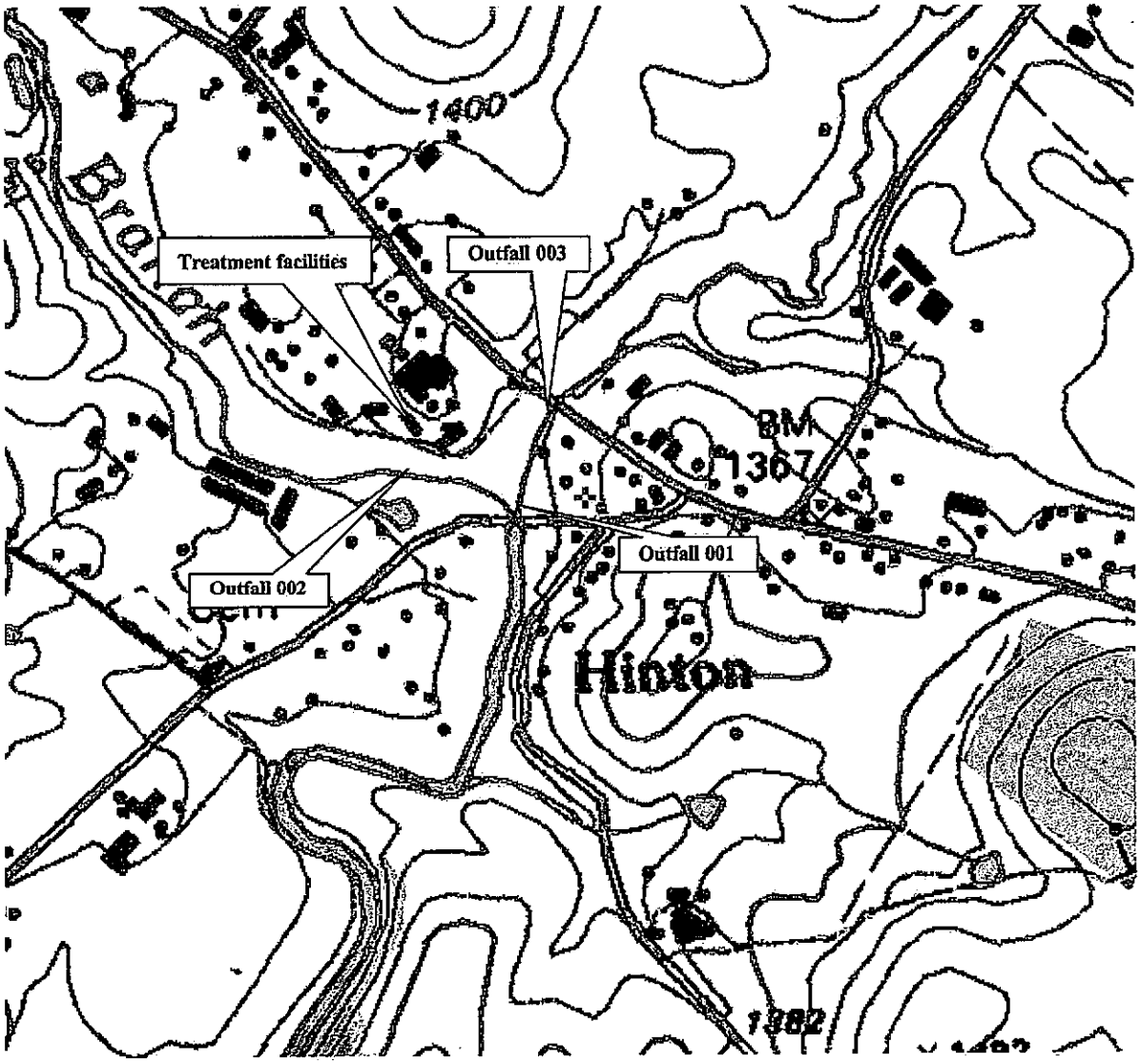
DISCHARGE LOCATION DESCRIPTION AND RECEIVING WATERS INFORMATION

This facility discharges to Muddy Creek and War Branch in Rockingham County. The locations of the treatment facilities and also the locations of Outfalls 001, 002, and 003 are shown on the topographic map below.

Relevant points of interest within the watershed and in the vicinity of the discharge are shown on the enclosed Water Quality Assessment TMDL Review and corresponding map.

Critical flows in the receiving stream at the discharge point are described in a Flow Frequency Determination that is presented on pages 4 of this appendix.

Mixing zone predictions were performed using information specific to the discharge and receiving stream characteristics with the Agency's Virginia DEQ Mixing Zone Analysis Version 2.1 program. The results are presented on page 5 of this appendix.



WATER QUALITY ASSESSMENTS TMDL REVIEW - POTOMAC-SHENANDOAH RIVER BASIN (6/15/2009)

IMPAIRED SEGMENTS:

SEGMENT ID	STREAM	SEGMENT START	SEGMENT END	SEGMENT LENGTH	PARAMETER
B21R-01-BAC	Dry River	6.32	0.00	6.32	E-coli, Fecal Coliform
B22R-01-BAC	Muddy Creek	10.31	0.00	10.31	E-coli, Fecal Coliform
B22R-01-BEN	Muddy Creek	10.31	0.00	10.31	Benthic
B22R-01-NO3	Muddy Creek	2.17	0.00	2.17	Nitrate-Nitrogen
B25R-01-BAC	Cooks Creek	13.31	0.00	13.31	E-coli, Fecal Coliform
B25R-01-BEN	Cooks Creek	13.31	0.00	13.31	Benthic
B25R-03-BAC	Sunset Heights Branch	4.31	0.00	4.31	Fecal Coliform
B26R-01-BAC	Blacks Run	10.73	0.00	10.73	E-coli, Fecal Coliform
B26R-01-BEN	Blacks Run	10.73	0.00	10.73	Benthic

PERMITS:

PERMIT	FACILITY	STREAM	RIVER MILE	LAT	LONG	WBID
VA0002313	**Virginia Poultry Growers Coop**	**Muddy Creek**	**3.70**	**382757**	**785834**	**VAV-B22R**
VA0002674	Harrisonburg WTP	Cooks Creek, UT	4.63	382735	785416	VAV-B25R
VA0062928	Calvary Mennonite Fellowship	Muddy Creek	5.52	382908	0785754	VAV-B22R
VA0090085	Dayton WTP	Cooks Creek	7.65	382512	785648	VAV-B25R

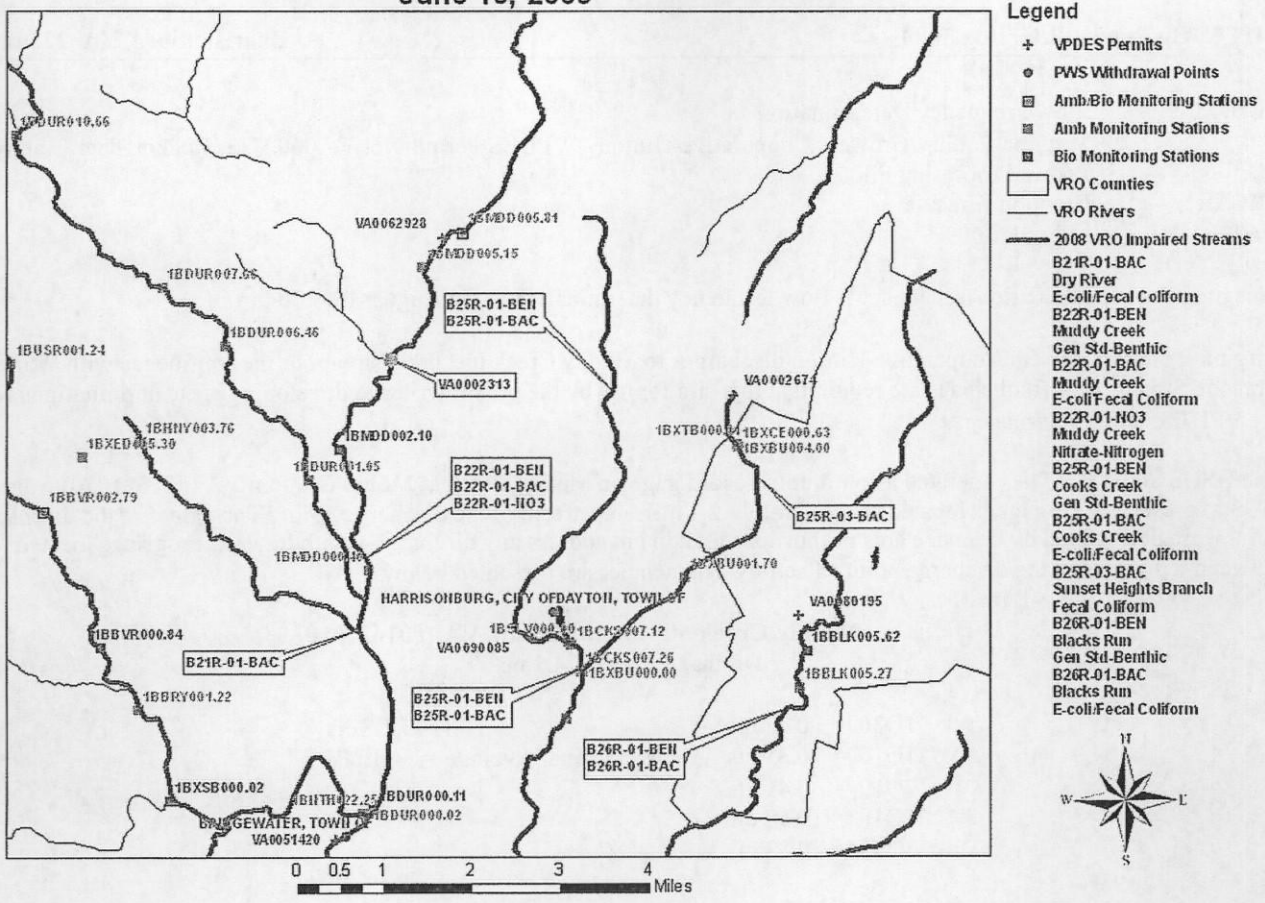
MONITORING STATIONS:

STREAM	NAME	RIVER MILE	RECORD	LAT	LONG
Muddy Creek	1BMDD005.81	5.81	9/03/93	382912	0785738
Dry River	1BDUR000.02	0.02	7/01/93	382333	0785851
Dry River	1BDUR007.66	7.66	7/01/93	382841	0790124
Muddy Creek	1BMDD000.40	0.4	7/01/91	382555	0785850
Cooks Creek	1BXBU000.00	0	1/2/01	382455	0785610
Cooks Creek, UT	1BXBU001.70	1.7	5/11/00	382549	0785453
Cooks Creek, UT	1BXBU004.00	4	5/11/00	38276	0785412
Blacks Run	1BBLK005.27	5.27	9/23/99	382444	0785327
Cooks Creek	1BCKS006.62	6.62	1/2/01	382427	0785623
Cooks Creek	1BCKS007.26	7.26	10/17/00	382455	0785611
Dry River	1BDUR001.05	1.05	6/28/00	382648	0785936
Dry River	1BDUR006.46	6.46	6/28/00	382806	0790038
Honey Run	1BHNY003.76	3.76	6/28/00	382711	0790141
Muddy Creek	1BMDD005.15	5.15	9/23/99	382852	0785880
Cooks Creek	1BCKS007.12	7.12	4/19/04	382510	0785618
Crooked Run, UT	1BXCE000.63	0.63	5/18/00	390301	0785412
Blacks Run	1BBLK005.62	5.62	1995	382506	0785321
Dry River	1BDUR000.11	0.11	July 1995	382334	0785846
Muddy Creek	1BMDD002.10	2.1	10/1/96	382706	0785913

PUBLIC WATER SUPPLY INTAKES:

OWNER	STREAM	RIVER MILE
Town of Bridgewater	North River	21.59
City of Harrisonburg	North River	19.55

Virginia Poultry Growers Cooperative Inc. - TMDL Information
Potomac-Shenandoah River Basin
June 15, 2009



Legend

- VPDES Permits
- PWS Withdrawal Points
- Amb/Bio Monitoring Stations
- Amb Monitoring Stations
- Bio Monitoring Stations
- VRO Counties
- VRO Rivers
- 2008 VRO Impaired Streams

B21R-01-BAC
Dry River
E-coli/Fecal Coliform
B22R-01-BEN
Muddy Creek
Gen Std-Benthic
B22R-01-BAC
Muddy Creek
E-coli/Fecal Coliform
B22R-01-NO3
Muddy Creek
Nitrate-Nitrogen
B25R-01-BEN
Cooks Creek
Gen Std-Benthic
B25R-01-BAC
Cooks Creek
E-coli/Fecal Coliform
B25R-03-BAC
Sunset Heights Branch
Fecal Coliform
B26R-01-BEN
Blacks Run
Gen Std-Benthic
B26R-01-BAC
Blacks Run
E-coli/Fecal Coliform

MEMORANDUM
DEPARTMENT OF ENVIRONMENTAL QUALITY
VALLEY REGIONAL OFFICE

4411 Early Road – P.O. Box 3000 **Harrisonburg, VA 22801**

SUBJECT: Flow Frequency Determination
Virginia Poultry Growers Cooperative-Hinton – VPDES Permit No. VA0002313, Rockingham County
TO: Permit Processing File
FROM: Brandon Kiracofe
DATE: May 11, 2009

This memo supersedes Eric Aschenbach's flow frequency determination dated August 19, 2004.

Virginia Poultry Growers Cooperative-Hinton discharges to Muddy Creek just downstream of the confluence with War Branch. Stream flow frequencies are required at this site for use by the permit writer in developing effluent limitations for the VPDES permit reissuance.

The USGS and VDEQ has operated a continuous record gage on Muddy Creek at Mount Clinton, VA (#01621050) from 1993 to present. This gage is located approximately 2.1 miles upstream of the discharge point. The values at the discharge point were determined by drainage area proportions and do not address any discharges, withdrawals, or springs located between the gage and the discharge point. The flow frequencies are presented below.

Muddy Creek at Mount Clinton, VA (#01621050)
Drainage Area = 14.2 mi^2

1Q30 =	0.22 cfs	HM =	2.8 cfs
1Q10 =	0.35 cfs	Annual Average =	11 cfs
7Q10 =	0.41 cfs		
30Q10 =	0.58 cfs		
30Q5 =	0.82 cfs		

Muddy Creek at Virginia Poultry Growers Cooperative -Hinton Outfall 001:
Drainage Area = 28.9 mi^2

1Q30 =	0.45 cfs	(0.29 mgd)	HM =	5.7 cfs	(3.7 mgd)
1Q10 =	0.71 cfs	(0.46 mgd)	Annual Average =	22 cfs	(14 mgd)
7Q10 =	0.83 cfs	(0.54 mgd)			
30Q10 =	1.18 cfs	(0.76 mgd)			
30Q5 =	1.67 cfs	(1.08 mgd)			

The analysis assumes that there are no significant discharges, withdrawals, or springs that may influence the flow in Muddy Creek or War Branch upstream of the discharge point.

Flow Values for Dry River and North River

7Q10 flows for Dry River at the confluence with Muddy Creek and North River at the confluence with Dry River were needed in order to determine effluent limits using the Regional Stream Model (see Appendix C for the model inputs and outputs).

DEQ staff observed no stream flow in Dry River prior to the confluence with Muddy Creek during the summer months; therefore, the 7Q10 for Dry River was set at 0 MGD in the Regional Stream Model.

The 7Q10 flow for North River at the confluence with Dry River was determined to be 6.8 MGD by performing a drainage area comparison with the 7Q10 flow calculated for North River just prior to the North River WWTF discharge point.

Mixing Zone Predictions (Virginia DEQ Mixing Zone Analysis Version 2.1)

1.1 MGD Flow Tier

Stream 7Q10 = 0.54 MGD
Stream 30Q10 = 0.76 MGD
Stream 1Q10 = 0.46 MGD
Stream slope = 0.002 ft/ft
Stream width = 17 ft
Bottom scale = 2
Channel scale = 1

Mixing Zone Predictions @ 7Q10

Depth = .3626 ft
Length = 859.44 ft
Velocity = .4119 ft/sec
Residence Time = .0242 days

Recommendation: A complete mix assumption is appropriate for this situation and the entire 7Q10 may be used.

Mixing Zone Predictions @ 30Q10

Depth = .3915 ft
Length = 804.4 ft
Velocity = .4326 ft/sec
Residence Time = .0215 days

Recommendation: A complete mix assumption is appropriate for this situation and the entire 30Q10 may be used.

Mixing Zone Predictions @ 1Q10

Depth = .3517 ft
Length = 882.3 ft
Velocity = .4039 ft/sec
Residence Time = .6068 hours

Recommendation: A complete mix assumption is appropriate for this situation and the entire 1Q10 may be used.

1.5 MGD Flow Tier

Stream 7Q10 = 0.54 MGD
Stream 30Q10 = 0.76 MGD
Stream 1Q10 = 0.46 MGD
Stream slope = 0.002 ft/ft
Stream width = 17 ft
Bottom scale = 2
Channel scale = 1

Mixing Zone Predictions @ 7Q10

Depth = .4142 ft
Length = 766.13 ft
Velocity = .4484 ft/sec
Residence Time = .0198 days

Recommendation: A complete mix assumption is appropriate for this situation and the entire 7Q10 may be used.

Mixing Zone Predictions @ 30Q10

Depth = .441 ft
Length = 725.69 ft
Velocity = .4666 ft/sec
Residence Time = .018 days

Recommendation: A complete mix assumption is appropriate for this situation and the entire 30Q10 may be used.

Mixing Zone Predictions @ 1Q10

Depth = .4042 ft
Length = 782.48 ft
Velocity = .4415 ft/sec
Residence Time = .4923 hours

Recommendation: A complete mix assumption is appropriate for this situation and the entire 1Q10 may be used.

APPENDIX C

EFFLUENT SCREENING AND EFFLUENT LIMITATIONS

Effluent Limitations

A comparison of technology and water quality-based limits was performed, and the most stringent limits were selected. The selected limits are summarized in the table below.

Outfall 001 **Final Limits** **Permitted Flow Tier: 1.1 MGD**

PARAMETER	BASIS FOR LIMITS	EFFLUENT LIMITATIONS				MONITORING REQUIREMENTS	
		Monthly Avg		Maximum		Frequency	Sample Type
Flow (MGD)	1	NL		NL		Continuous	TIRE
BOD_5	2,4,5	15 mg/L	62 kg/d	26 mg/L	110 kg/d	2/Month	24 HC
TSS	2	20 mg/L	83 kg/d	30 mg/L	120 kg/d	1/Month	24 HC
Ammonia-N	3	4.0 mg/L		8.0 mg/L		1/Week	24 HC
Effluent Chlorine (TRC)*	4	0.012 mg/L		0.023 mg/L		1/Day	Grab
E. coli* (geometric mean)	4	126 N/100 mL		NA		2/Month @ least 7 days apart 10 am to 4 pm	Grab
E. coli** (geometric mean)	4	126 N/100 mL		NA		3 Days/Week @ 48 hr intervals between 10 am to 4 pm	Grab
Nitrate	7	15 mg/L	61 kg/d	30 mg/L	120 kg/d	1/Month	24 HC
Total Nitrogen (TN)	3	103 mg/L	430 kg/d	147 mg/L	610 kg/d	2/Month	Calculated
		Minimum		Maximum			
pH	4	6.5 S.U.		9.0 S.U.		1/Day	Grab
Dissolved Oxygen	4,5	6.0 mg/L		NA		1/Day	Grab
Fecal Coliform	2	NA		400 N/100 mL		1/Year	Grab
Contact Chlorine (TRC)*	4,6	1.0 mg/L		NA		1/2 Hr	Grab
Chronic Whole Effluent Toxicity	4	NA		2.17 TU_c		1/Year	24 HC

NL = No Limitation, monitoring required
TIRE = Totalizing, Indicating, and Recording equipment
NA = Not Applicable
24 HC = 24 Hour composite sample

* = Applicable only when chlorination is used for disinfection
** = Applicable if an alternative to chlorination is used for disinfection

Bases for Effluent Limitations

1. VPDES Permit Regulation (9 VAC 25-31)
2. Federal Effluent Requirements (Meat and Poultry Products – 40CFR432 – Subpart K - BPT)
3. Federal Effluent Requirements (Meat and Poultry Products – 40CFR432 – Subpart K - BAT)
4. Water Quality Standards (9 VAC 25-260)
5. Regional Stream Model simulation
6. Best Professional Judgment (BPJ)
7. Nitrate TMDL for Muddy Creek/Dry River

Outfall 001 **Final Limits** **Permitted Flow Tier: 1.5 MGD**

PARAMETER	BASIS FOR LIMITS	EFFLUENT LIMITATIONS				MONITORING REQUIREMENTS	
		Monthly Avg		Maximum		Frequency	Sample Type
Flow (MGD)	1	NL		NL		Continuous	TIRE
BOD_5	2,4,5	14 mg/L	79 kg/d	26 mg/L	150 kg/d	2/Month	24 HC
TSS	2	20 mg/L	110 kg/d	30 mg/L	170 kg/d	1/Month	24 HC
Ammonia-N	3,4	4.0 mg/L		7.7 mg/L		1/Week	24 HC
Effluent Chlorine (TRC)*	4	0.010 mg/L		0.020 mg/L		1/Day	Grab
E. coli* (geometric mean)	4	97 N/100 mL		NA		2/Month @ least 7 days apart 10 am to 4 pm	Grab
E. coli** (geometric mean)	4	97 N/100 mL		NA		3 Days/Week @ 48 hr intervals between 10 am to 4 pm	Grab
Nitrate	7	11 mg/L	61 kg/d	22 mg/L	120 kg/d	1/Month	24 HC
Total Nitrogen (TN)	3	103 mg/L	580 kg/d	147 mg/L	830 kg/d	2/Month	Calculated
		Minimum		Maximum			
pH	4	6.5 S.U.		9.0 S.U.		1/Day	Grab
Dissolved Oxygen	4,5	6.0 mg/L		NA		1/Day	Grab
Fecal Coliform	2	NA		400 N/100 mL		1/Year	Grab
Contact Chlorine (TRC)*	4,6	1.0 mg/L		NA		1/2 Hr	Grab
Chronic Whole Effluent Toxicity	4	NA		1.96 TU_c		1/Year	24 HC

NL = No Limitation, monitoring required
TIRE = Totalizing, Indicating, and Recording equipment
NA = Not Applicable
24 HC = 24 Hour composite sample

* = Applicable only when chlorination is used for disinfection
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Bases for Effluent Limitations

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3. Federal Effluent Requirements (Meat and Poultry Products – 40CFR432 – Subpart K - BAT)
4. Water Quality Standards (9 VAC 25-260)
5. Regional Stream Model simulation
6. Best Professional Judgment (BPJ)
7. Nitrate TMDL for Muddy Creek/Dry River

Limiting Factors – Overview:

The following potential limiting factors have been considered in developing this permit and fact sheet:

Water Quality Management Plan Regulation (9 VAC 25-720)	
A. TMDL limits	**None**
B. Non-TMDL Waste Load Allocations (WLAs)	**None**
C. CBP (TN & TP) WLAs	**TN, TP by coverage under VAN010009**
Federal Effluent Guidelines	**Ammonia-N, BOD_5, Fecal Coliform, Oil & Grease, TSS, Total Nitrogen, pH**
BPJ/Agency Guidance limits	**TRC (contact)**
Water Quality-based Limits - numeric	**BOD_5, DO, Ammonia-N, TRC (effluent), E. coli, pH**
Water Quality-based Limits - narrative	**None**
Toxics Management Plan (TMP)	**Chronic WET limits**
Storm Water Limits	**None**

EVALUATION OF THE EFFLUENT – FEDERAL EFFLUENT GUIDELINES

Because Virginia Poultry Growers Cooperative-Hinton slaughters more than 100 million pounds per year (in units of (Live Weight Killed)), the facility is subject to the Federal Effluent Guideline (FEG) for Meat and Poultry Products – 40CFR432 – Subpart K which became effective on October 8, 2004. The following table shows the effluent limitations attainable by the application of the best practical control technology available (BPT).

Regulated parameter	Monthly Average[1]	Daily Maximum[1]
Ammonia (as N)	4.0	8.0
BOD_5	16	26
Fecal Coliform	([3])	([2])
Oil & Grease	8.0	14
TSS	20	30

[1] mg/L (ppm).
[2] Maximum of 400 MPN or CFU per 100 mL at any time.
[3] No maximum monthly average limitation.

The following table indicates the effluent limitations attainable by the application of the best available technology economically achievable (BAT).

Regulated parameter	Monthly Average[1]	Daily Maximum[1]
Ammonia (as N)	4.0	8.0
Total Nitrogen	103	147

[1] mg/L (ppm).

The effluent limitations attainable by the application of the best control technology for conventional pollutants (BCT) are the same as the BPT limitations for BOD_5, TSS, O&G (as HEM), and Fecal Coliform.

Because this facility is an existing direct discharger, it is subject to BPT, BAT, and BCT effluent limitations.

Any discharge subject to BPT, BCT, or NSPS limitations or standards in Part 432 must remain within the pH range of 6.0 to 9.0 SU.

EVALUATION OF THE EFFLUENT – CONVENTIONAL POLLUTANTS

The FEG specifies BOD_5 concentration limits. At this reissuance the discharge was remodeled using the Regional Stream Model to determine the effluent concentrations of $CBOD_5$, TKN, and DO that are protective of the WQS for DO at the 1.1 MGD and 1.5 MGD flow tiers. The discharge was remodeled due to new stream flow and temperature information. The modeled concentrations of $CBOD_5$ and TKN were then converted to an equivalent BOD_5 concentration utilizing the following assumptions:

$CBOD_u = cBOD_5 \times 2.5$ $\quad$ $BOD_u = CBOD_u + nBOD_u$

$nBOD_u = (TKN - 3.0) \times 4.33$ $\quad$ $BOD_5 = BOD_u/2.5$

The resulting monthly average BOD_5 calculated from the modeled parameters was then compared to the FEG monthly average limit of 16 mg/L, and the most restrictive value was imposed in the permit. Because this is an industrial facility, a scale-up factor of 2 was used to calculate in the daily maximum concentration limit from the monthly average limit. At both flow tiers the resulting daily maximum limits based on the DO model were higher than the FEG daily maximum limit of 26 mg/L; therefore, the daily maximum limit at both flow tiers were set at 26 mg/L. Because wet season flow frequencies were not available, wet season limits have not been included at this reissuance.

The comparisons between water quality-based limits and FEG limits are shown below:

1.1 MGD

$CBOD_5 = 10$ mg/L $\quad$ TKN = 5.9 mg/L

$CBOD_u = 10$ mg/L x 2.5 = 25 mg/L $\quad$ $nBOD_u = (5.9$ mg/L – 3.0) x 4.33 = 12.6 mg/L

$BOD_u = 25$ mg/L + 12.6 mg/L = 37.6 mg/L

$BOD_5 = 37.6$ mg/L/2.5 = 15 mg/L

Monthly average $BOD_5 = 15$ mg/L < 16 mg/L; therefore, **15 mg/L utilized as monthly average limit**

Daily maximum $BOD_5 = 30$ mg/L > 26 mg/L; therefore, **26 mg/L utilized as daily maximum limit**

1.5 MGD

$CBOD_5 = 9.2$ mg/L $\quad$ TKN = 5.9 mg/L

$CBOD_u = 9.2$ mg/L x 2.5 = 23 mg/L $\quad$ $nBOD_u = (5.9$ mg/L – 3.0) x 4.33 = 12.6 mg/L

$BOD_u = 23$ mg/L + 12.6 mg/L = 35.6 mg/L

$BOD_5 = 34.6$ mg/L/2.5 = 14 mg/L

Monthly average $BOD_5 = 14$ mg/L < 16 mg/L; therefore, **14 mg/L utilized as monthly average limit**

Daily maximum $BOD_5 = 28$ mg/L > 26 mg/L; therefore, **26 mg/L utilized as daily maximum limit**

The monitoring frequency for BOD_5 has been increased in order to match the monitoring frequency specified for STPs of similar size. The VPDES Permit Manual indicates a monitoring frequency of 1/Week for a STP with a design flow between 1 MGD and 2 MGD. Based on the review of the effluent data during the previous permit term, the effluent BOD_5 concentration averaged approximately 40% of the monthly average limit. In accordance with the reduced monitoring guidance, the monitoring frequency has been reduced from 1/Week to 2/Month.

The DO minimum limit of 6.0 mg/L has been carried forward from the previous permit.

The monthly average Ammonia-N limits imposed in this permit are specified in the FEG (see Ammonia-N discussion later in this attachment). Stats.exe was utilized to determine the WLA that would result in the Ammonia-N limits specified in the FEG at a monitoring frequency of 1/Week. That WLA was determined to be 2.9 mg/L. Because the modeled effluent TKN value of 5.9 mg/L was more than two times the calculated WLA of 2.9 mg/L, it was determined that no TKN limits were needed because the Ammonia-N limits imposed in this permit will control TKN.

The WQSs for pH in the receiving stream are 6.5 – 9.5 SU. The FEG specifies that the pH must be from 6.0 – 9.0 SU; therefore, a minimum pH limit of 6.5 SU and a maximum pH limit of 9.0 SU have been carried forward from the previous permit. The monitoring frequency for pH has been increased to 1/Day because pH adjustment is a part of the treatment process at this facility.

The Fecal Coliform, Oil & Grease (as HEM), TSS, and TN limits reflect the limits specified in the FEG and have been carried forward from the previous permit.

The Muddy Creek TMDL includes a Sediment WLA of 329,318 lb/yr for this facility which represents a TSS monthly average loading of 410 kg/day. The TSS monthly average loading limit for the 1.5 MGD flow tier imposed at this reissuance based on FEG requirements is 110 kg/d.

EVALUATION OF THE EFFLUENT – DISINFECTION

The Muddy Creek TMDL includes a Fecal Coliform WLA of 8.34×10^8 cfu/day for this facility. DEQ TMDL staff provided the following translator equation "2^(LOG(Fecal Coliform Concentration,2)*0.91905-0.0172" to calculate the E. coli concentration that is necessary to meet the Fecal Coliform WLA. Based on this equation and the facility's current permitted flow tier of 1.1 MGD, the Fecal Coliform WLA corresponds to an E. coli concentration limit of 126 cfu/100 mL. Based on this equation and the facility's current design flow tier of 1.5 MGD, the Fecal Coliform WLA corresponds to an E. coli concentration limit of 97 cfu/100 mL. The E. coli limit of 97 cfu/100 mL is more stringent than the previous limit. Because chlorination is currently utilized for disinfection, E. coli monitoring is required 2/Month to demonstrate compliance with the concentration limit. In addition to the E. coli monitoring and limit the facility must also meet minimum TRC limits. When an alternative to chlorination is utilized, E. coli monitoring is required 3/Week at 48-hr intervals.

EVALUATION OF THE EFFLUENT – NUTRIENTS

In accordance with § 62.1-44.19:14.C.5. of the Code of Virginia, this Significant Discharger has submitted a Registration Statement and DEQ has recognized that they are covered under the General Virginia Pollutant Discharge Elimination System (VPDES) Watershed Permit Regulation for Total Nitrogen and Total Phosphorus Discharges and Nutrient Trading in the Chesapeake Bay Watershed in Virginia (9 VAC 25-820-10 *et seq.*). The effective date of coverage is January 1, 2007. Coverage under the General Permit will expire December 31, 2011.

The load limit for TN is 27,410 pounds per calendar year and TP is 1,371 pounds per calendar year. These mass or load limits are established in 9 VAC 25-720-70.C based on the design flow as of July 1, 2005 (1.5 MGD), a TN effluent concentration of 6.0 mg/L, and a TP effluent concentration of 0.3 mg/L.

Prior to a facility expansion, the permittee must demonstrate that sufficient WLAs have been acquired to offset any increase in the delivered TN and delivered TP loads. The CER requirement and the permit reopener condition ensure that the facility will receive appropriate concentration limits when necessary for expanded or upgraded facilities based on the treatment technology proposed.

The Muddy Creek TMDL includes a Nitrate WLA of 49,389 lb/yr for this facility which represents a 35% reduction from pre-TMDL levels. At the last reissuance, DEQ TMDL staff recommended that the nitrate limits be imposed as monthly average and daily maximum concentration and loading limits. This approach and the previous limits have been continued at this reissuance, except for a more stringent monthly average loading limit of 61 kg/d. This more stringent limit has been included at both flow tiers in order to ensure compliance with the TMDL. Although the limit is more stringent, no compliance schedule has been included because a review of monitoring data indicated that the facility consistently achieves compliance with the more stringent limit.

EVALUATION OF THE EFFLUENT – TOXIC POLLUTANTS
Input parameters for instream water quality criteria (WQC) and WLAs

Stream: Water quality data for the receiving stream was obtained from Ambient Monitoring Station No. 1BMDD005.81 on Muddy Creek at the Rte 726 bridge. Toxic substances, including Ammonia-N and TRC, are assumed absent in the receiving stream because there are no data to indicate their presence.

Stream Parameter	Value	Units
Mean Hardness (as $CaCO_3$) =	228	mg/L
90th Percentile Temperature =	23.7	°C
90th Percentile Maximum pH =	8.7	SU
10th Percentile Maximum pH =	7.6	SU

Effluent: The pH and temperature values were obtained from the daily operational data submitted by the permittee. The hardness value was obtained from monitoring data collected during a DEQ inspection.

Effluent Parameter	Value	Units
Mean Hardness (as $CaCO_3$) =	228	mg/L
90th Percentile Temperature =	23.4	°C
90th Percentile Maximum pH =	7.2	SU
10th Percentile Maximum pH =	6.8	SU

WQC and WLAs were calculated for the WQS parameters for which data is available. Those WQC and WLAs are presented in this appendix. Current agency guidelines recommends the evaluation of toxic pollutant limits for TRC and Ammonia-N based on default effluent concentrations of 20 mg/L and 9 mg/L, respectively. The effluent data were analyzed per the protocol for evaluation of effluent toxic pollutants included in this appendix with the following results:

- TRC: Limits were determined to be necessary for TRC. The monthly average limit for the 1.1 MGD flow tier appears to be less stringent than the previous limit and the daily maximum limit for the 1.5 MGD flow tier appears to be more stringent than the previous limit; however, the change in both limits is due to the TRC WLAs being rounded in accordance with current rounding guidance.
- Ammonia-N: The water-quality based monthly average and daily maximum Ammonia-N limits were compared to the FEG monthly average limit of 4.0 mg/L and the daily maximum limit of 8.0 mg/L, and the most restrictive values were imposed in the permit. Because wet season flow frequencies were not available, wet season limits have not been included at this reissuance. The comparisons between water quality-based limits and FEG limits are shown below:

  1.1 MGD
  Monthly average Ammonia-N = 5.6 mg/L > 4.0 mg/L; therefore, **4.0 mg/L utilized as monthly average limit**
  Daily maximum Ammonia-N = 8.2 mg/L > 8.0 mg/L; therefore, **8.0 mg/L utilized as daily maximum limit**

  1.5 MGD
  Monthly average Ammonia-N = 5.2 mg/L > 4.0 mg/L; therefore, **4.0 mg/L utilized as monthly average limit**
  Daily maximum Ammonia-N = 7.7 mg/L < 8.0 mg/L; therefore, **7.7 mg/L utilized as daily maximum limit**

Additional information at this reissuance for effluent pH, effluent temperature, and stream flow resulted in the determination of less stringent Ammonia-N limits. Because new information is available which would have justified less stringent limits when the previous limits were established, had that information been available, the less stringent Ammonia-N limits in this permit reissuance comply with the Antibacksliding provisions of the VPDES Permit Regulation.

The monitoring frequency for Ammonia-N has been increased in order to match the monitoring frequency specified for STPs of similar size. The VPDES Permit Manual indicates a monitoring frequency of 3-5 Days/Week for a STP with a design flow between 1 MGD and 2 MGD. Based on the review of the effluent data during the previous permit term, the effluent Ammonia-N concentration averaged approximately 11% of the monthly average limit. In accordance with the reduced monitoring guidance, the monitoring frequency has been reduced from 3-5 Days/Week to 1/Week.

- Beta Particle & Photon Activity: The effluent data submitted by the permittee suggests the Beta Particle & Photon Activity associated with the discharge is acceptable. 50 pCi/L or less Beta Particle & Photon Activity is generally considered non-hazardous. There is currently no laboratory test available to directly measure the effluent mrem/yr exposure value of Beta Particle & Photon Activity. This unit of measurement must be logged using a radiation exposure badge.

- Additional monitoring data is needed for four pollutants due to the lack of effluent quality data. The permittee must monitor the effluent at Outfall 001 for the substances noted in Attachment A of the permit once after the start of the third year from the permit's effective date.

1.1 MGD Flow Tier

WATER QUALITY CRITERIA / WASTE LOAD ALLOCATION ANALYSIS

Facility Name: Virginia Poultry Growers Cooperative-Hinton
Receiving Stream: Muddy Creek
Permit No.: VA0002313
Date: 10/1/2009
Version: OWP Guidance Memo 00-2011 (8/24/00)

Stream Information		Stream Flows		Mixing Information			Effluent Information	
Mean Hardness (as CaCO3) =	228 mg/L	1Q10 (Annual) =	0.29 MGD	Annual	- 1Q10 Flow =	100 %	Mean Hardness (as CaCO3) =	228 mg/L
90% Temperature (Annual) =	23.7 deg C	7Q10 (Annual) =	0.46 MGD		- 7Q10 Flow =	100 %	90% Temp (Annual) =	23.4 deg C
90% Temperature (Wet season) =	deg C	30Q10 (Annual) =	0.54 MGD		- 30Q10 Flow =	100 %	90% Temp (Wet season) =	deg C
90% Maximum pH =	8.7 SU	1Q10 (Wet season) =	MGD	Wet Season	- 1Q10 Flow =	%	90% Maximum pH =	7.2 SU
10% Maximum pH =	7.6 SU	30Q10 (Wet season) =	MGD		- 30Q10 Flow =	%	10% Maximum pH =	6.8 SU
Tier Designation =	1	30Q5 =	1.08 MGD				Current Discharge Flow =	1.1 MGD
Public Water Supply (PWS) Y/N? =	N	Harmonic Mean =	3.7 MGD				Discharge Flow for Limit Analysis =	1.1 MGD
V(alley) or P(iedmont)? =	V							
Trout Present Y/N? =	N							
Early Life Stages Present Y/N? =	Y							

Footnotes:
1 All concentrations expressed as micrograms/liter (ug/l), unless noted otherwise
2 All flow values are expressed as Million Gallons per Day (MGD).
3 Discharge volumes are highest monthly average or 2C maximum for Industries and design flows for Municipals
4 Hardness expressed as mg/l CaCO3. Standards calculated using Hardness values in the range of 25-400 mg/l CaCO3.
5 "Public Water Supply" protects for fish & water consumption "Other Surface Waters" protects for fish consumption only
6. Carcinogen "Y" indicates carcinogenic parameter
7. Ammonia WQSs selected from separate tables, based on pH and temperature
8 Metals measured as Dissolved, unless specified otherwise
9 WLA = Waste Load Allocation (based on standards).
10. WLA = Waste Load Allocation (based on standards).
11 WLAs are based on mass balances (less background, if data exist).
12. Acute - 1 hour avg. concentration not to be exceeded more than 1/3 years
13. Chronic - 4 day avg. concentration (30 day avg. for Ammonia) not to be exceeded more than 1/3 years.
14 Mass balances employ 1Q10 for Acute, 30Q10 for Chronic Ammonia, 7Q10 for Other Chronic, 30Q5 for Non-carcinogens, and Harmonic Mean for Carcinogens. Actual flows employed are a function of the mixing analysis and may be less than the actual flows.
15 Effluent Limitations are calculated elsewhere using the minimum WLA and EPA's statistical approach (Technical Support Document).

Facility Name: Virginia Poultry Growers Cooperative-Hinton
Permit No.: VA0002313
Receiving Stream: Muddy Creek
Date: 10/1/2009

WATER QUALITY CRITERIA
1.1 MGD Discharge Flow - Mix per "Mixer"

NON-ANTIDEGRADATION WASTE LOAD ALLOCATIONS
1.1 MGD Discharge - Mix per "Mixer"

Toxic Parameter and Form	Carcinogen?	Aquatic Protection Acute	Aquatic Protection Chronic	Human Health Public Water Supplies	Human Health Other Surface Waters	Aquatic Protection Acute	Aquatic Protection Chronic	Human Health
Ammonia-N (Annual)	N	2.6E+01 mg/L	2.7E+00 mg/L	None	None	3.3E+01 mg/L	4.1E+00 mg/L	N/A
Chlorine, Total Residual	N	1.9E-02 mg/L	1.1E-02 mg/L	None	None	2.4E-02 mg/L	1.6E-02 mg/L	N/A

1.5 MGD Flow Tier

WATER QUALITY CRITERIA / WASTE LOAD ALLOCATION ANALYSIS

Facility Name: Virginia Poultry Growers Cooperative-Hinton
Receiving Stream: Muddy Creek
Permit No.: VA0002313
Date: 9/4/2009
Version: OWP Guidance Memo 00-2011 (8/24/00)

Stream Information		Stream Flows		Mixing Information			Effluent Information	
Mean Hardness (as CaCO3) =	228 mg/L	1Q10 (Annual) =	0.29 MGD	Annual	- 1Q10 Flow =	100 %	Mean Hardness (as CaCO3) =	228 mg/L
90% Temperature (Annual) =	23.7 deg C	7Q10 (Annual) =	0.46 MGD		- 7Q10 Flow =	100 %	90% Temp (Annual) =	23.4 deg C
90% Temperature (Wet season) =	deg C	30Q10 (Annual) =	0.54 MGD		- 30Q10 Flow =	100 %	90% Temp (Wet season) =	deg C
90% Maximum pH =	8.7 SU	1Q10 (Wet season) =	MGD	Wet Season	- 1Q10 Flow =	%	90% Maximum pH =	7.2 SU
10% Maximum pH =	7.6 SU	30Q10 (Wet season) =	MGD		- 30Q10 Flow =	%	10% Maximum pH =	6.8 SU
Tier Designation =	1	30Q5 =	1.08 MGD				Current Discharge Flow =	1.1 MGD
Public Water Supply (PWS) Y/N? =	N	Harmonic Mean =	3.7 MGD				Discharge Flow for Limit Analysis =	1.5 MGD
V(alley) or P(iedmont)? =	V	Annual Average =	14 MGD					
Trout Present Y/N? =	N							
Early Life Stages Present Y/N? =	Y							

Footnotes:
1 All concentrations expressed as micrograms/liter (ug/l), unless noted otherwise
2 All flow values are expressed as Million Gallons per Day (MGD)
3 Discharge volumes are highest monthly average or 2C maximum for Industries and design flows for Municipals.
4 Hardness expressed as mg/l CaCO3. Standards calculated using Hardness values in the range of 25-400 mg/l CaCO3
5 "Public Water Supply" protects for fish & water consumption "Other Surface Waters" protects for fish consumption only
6. Carcinogen "Y" indicates carcinogenic parameter.
7 Ammonia WQSs selected from separate tables, based on pH and temperature
8 Metals measured as Dissolved, unless specified otherwise
9 WLA = Waste Load Allocation (based on standards).
10 WLA = Waste Load Allocation (based on standards)
11 WLAs are based on mass balances (less background, if data exist)
12 Acute - 1 hour avg. concentration not to be exceeded more than 1/3 years
13 Chronic - 4 day avg. concentration (30 day avg. for Ammonia) not to be exceeded more than 1/3 years
14 Mass balances employ 1Q10 for Acute, 30Q10 for Chronic Ammonia, 7Q10 for Other Chronic, 30Q5 for Non-carcinogens, Harmonic Mean for Carcinogens, and Annual Average for Dioxin Actual flows employed are a function of the mixing analysis and may be less than the actual critical flows
15 Effluent Limitations are calculated elsewhere using the minimum WLA and EPA's statistical approach (Technical Support Document).

Facility Name:	Permit No.:
Virginia Poultry Growers Cooperative-Hinton	VA0002313
Receiving Stream:	Date:
Muddy Creek	10/2/2009

		WATER QUALITY CRITERIA 1.5 MGD Discharge Flow - Mix per "Mixer"				NON-ANTIDEGRADATION WASTE LOAD ALLOCATIONS 1.5 MGD Discharge - Mix per "Mixer"		
		Aquatic Protection		Human Health		Aquatic Protection		Human
Toxic Parameter and Form	Carcinogen?	Acute	Chronic	Public Water Supplies	Other Surface Waters	Acute	Chronic	Health
Acenaphthene	N	None	None	9.7E+02	9.9E+02	N/A	N/A	1.7E+03
Acrolein	N	None	None	6.1E+00	9.2E+00	N/A	N/A	1.6E+01
Acrylonitrile	Y	None	None	5.1E-01	2.5E+00	N/A	N/A	9.7E+00
Aldrin	Y	3.0E+00	None	4.9E-04	5.0E-04	3.0E+00	N/A	1.7E-03
Ammonia-N (Annual)	N	2.7E+01 mg/L	2.8E+00 mg/L	None	None	3.2E+01 mg/L	3.5E+00 mg/L	N/A
Anthracene	N	None	None	8.3E+03	4.0E+04	N/A	N/A	6.9E+04
Antimony	N	None	None	5.6E+00	6.4E+02	N/A	N/A	1.1E+03
Arsenic	N	3.4E+02	1.5E+02	1.0E+01	None	4.1E+02	2.0E+02	N/A
Barium	N	None	None	2.0E+03	None	N/A	N/A	N/A
Benzene	Y	None	None	2.2E+01	5.1E+02	N/A	N/A	1.4E+03
Benzidine	Y	None	None	8.6E-04	2.0E-03	N/A	N/A	5.9E-03
Benzo(a)anthracene	Y	None	None	3.8E-02	1.8E-01	N/A	N/A	6.2E-01
Benzo(a)pyrene	Y	None	None	3.8E-02	1.8E-01	N/A	N/A	6.2E-01
Benzo(b)fluoranthene	Y	None	None	3.8E-02	1.8E-01	N/A	N/A	6.2E-01
Benzo(k)fluoranthene	Y	None	None	3.8E-02	1.8E-01	N/A	N/A	6.2E-01
Bis2-Chloroethyl Ether	Y	None	None	3.0E-01	5.3E+00	N/A	N/A	1.8E+01
Bis2-Chloroisopropyl Ether	N	None	None	1.4E+03	6.5E+04	N/A	N/A	1.1E+05
Bis2-Ethylhexyl Phthalate	Y	None	None	1.2E+01	2.2E+01	N/A	N/A	7.8E+01
Bromoform	Y	None	None	4.3E+01	1.4E+03	N/A	N/A	4.9E+03
Butyl Benzyl Phthalate	N	None	None	1.5E+03	1.9E+03	N/A	N/A	3.3E+03
Cadmium	N	9.9E+00	2.2E+00	5.0E+00	None	1.2E+01	2.8E+00	N/A
Carbon Tetrachloride	Y	None	None	2.3E+00	1.6E+01	N/A	N/A	8.6E+01
Chlordane	Y	2.4E+00	4.3E-03	8.0E-03	8.1E-03	2.9E+00	5.8E-03	2.8E-02
Chloride	N	8.6E+02 mg/L	2.3E+02 mg/L	2.5E+02 mg/L	None	1.0E+03 mg/L	3.0E+02 mg/L	N/A
Chlorine, Total Residual	N	1.9E-02 mg/L	1.1E-02 mg/L	None	None	2.3E-02 mg/L	1.4E-02 mg/L	N/A
Chlorobenzene	N	None	None	1.3E+02	1.6E+03	N/A	N/A	2.9E+03
Chlorodibromomethane	Y	None	None	4.0E+00	1.3E+02	N/A	N/A	4.5E+02
Chloroform	N	None	None	3.4E+02	1.1E+04	N/A	N/A	1.9E+04
2-Chloronaphthalene	N	None	None	1.0E+03	1.6E+03	N/A	N/A	2.9E+03
2-Chlorophenol	N	None	None	8.1E+01	1.5E+02	N/A	N/A	2.6E+02
Chlorpyrifos	N	8.3E-02	4.1E-02	None	None	9.9E-02	5.4E-02	N/A
Chromium (+3)	N	1.1E+03	1.5E+02	None	None	1.3E+03	1.9E+02	N/A
Chromium (+6)	N	1.6E+01	1.1E+01	None	None	1.9E+01	1.4E+01	N/A
Total Chromium	N	None	None	1.0E+02	None	N/A	N/A	N/A
Chrysene	Y	None	None	4.4E-02	4.8E-01	N/A	N/A	1.7E+00
Copper	N	2.8E+01	1.8E+01	1.3E+03	None	3.5E+01	2.4E+01	N/A
Cyanide, Free	N	2.2E+01	5.2E+00	1.4E+02	1.6E+04	2.0E+01	6.6E+00	2.6E+04
DDD	Y	None	None	3.1E-03	3.1E-03	N/A	N/A	1.1E-02
DDE	Y	None	None	2.2E-03	2.2E-03	N/A	N/A	7.8E-03
DDT	Y	1.1E+00	1.0E-03	2.2E-03	2.2E-03	1.3E+00	1.3E-03	7.8E-03
Demeton	N	None	1.0E-01	None	None	N/A	1.3E-01	N/A
Diazinon	N	1.7E-01	1.7E-01	None	None	2.0E-01	2.2E-01	N/A
Dibenz(a,h)anthracene	Y	None	None	3.8E-02	1.8E-01	N/A	N/A	6.2E-01
1,2-Dichlorobenzene	N	None	None	4.2E+02	1.3E+03	N/A	N/A	2.7E+03
1,3-Dichlorobenzene	N	None	None	3.2E+02	9.6E+02	N/A	N/A	1.7E+03
1,4-Dichlorobenzene	N	None	None	6.3E+01	1.9E+02	N/A	N/A	3.3E+02
3,3-Dichlorobenzidine	Y	None	None	2.1E-01	2.8E-01	N/A	N/A	9.7E-01
Dichlorobromomethane	Y	None	None	5.5E+00	1.7E+02	N/A	N/A	5.9E+02
1,2-Dichloroethane	Y	None	None	3.8E+00	3.7E+02	N/A	N/A	1.3E+03
1,1-Dichloroethylene	N	None	None	3.3E+02	7.1E+03	N/A	N/A	1.2E+04
1,2-trans-Dichloroethylene	N	None	None	1.4E+02	1.0E+04	N/A	N/A	1.7E+04
2,4-Dichlorophenol	N	None	None	7.7E+01	2.9E+02	N/A	N/A	5.0E+02
2,4-Dichlorophenoxy Acetic Acid	N	None	None	1.0E+02	None	N/A	N/A	N/A
1,2-Dichloropropane	Y	None	None	5.0E+00	1.5E+02	N/A	N/A	6.2E+02
1,3-Dichloropropene	Y	None	None	3.4E+00	2.1E+02	N/A	N/A	7.3E+02
Dieldrin	Y	2.4E-01	5.6E-02	5.2E-04	5.4E-04	2.8E-01	7.3E-02	1.9E-03
Diethyl Phthalate	N	None	None	1.7E+04	4.4E+04	N/A	N/A	7.6E+04
2,4 Dimethylphenol	N	None	None	3.8E+02	8.5E+02	N/A	N/A	1.5E+03
Dimethyl Phthalate	N	None	None	2.7E+05	1.1E+06	N/A	N/A	1.9E+06
Di-n-Butyl Phthalate	N	None	None	2.0E+03	4.5E+03	N/A	N/A	7.7E+03
2,4 Dinitrophenol	N	None	None	6.9E+01	5.3E+03	N/A	N/A	9.1E+03
2-Methyl-4,6-Dinitrophenol	N	None	None	1.3E+01	2.8E+02	N/A	N/A	4.8E+02
2,4-Dinitrotoluene	Y	None	None	1.1E+00	3.4E+01	N/A	N/A	1.2E+02
Dioxin	N	None	None	5.0E-08	5.1E-08	N/A	N/A	5.3E-08
1,2-Diphenylhydrazine	Y	None	None	3.6E-01	2.0E+00	N/A	N/A	6.9E+00
Alpha-Endosulfan	N	2.2E-01	5.6E-02	6.2E+01	8.9E+01	2.6E-01	7.3E-02	1.5E+02
Beta-Endosulfan	N	2.2E-01	5.6E-02	6.2E+01	8.9E+01	2.6E-01	7.3E-02	1.5E+02
Alpha+Beta-Endosulfan	N	2.2E-01	5.6E-02	None	None	2.6E-01	7.3E-02	N/A
Endosulfan Sulfate	N	None	None	6.2E+01	8.9E+01	N/A	N/A	1.5E+02
Endrin	N	8.6E-02	3.6E-02	6.9E-02	6.0E-02	1.0E-01	4.7E-02	1.0E-01
Endrin Aldehyde	N	None	None	2.9E-01	3.0E-01	N/A	N/A	8.2E-01
Ethylbenzene	N	None	None	3.2E+02	2.1E+03	N/A	N/A	3.6E+03
Fluoranthene	N	None	None	1.3E+02	1.4E+02	N/A	N/A	2.4E+02
Fluorene	N	None	None	1.1E+03	5.3E+03	N/A	N/A	9.1E+03
Foaming Agents (MBAS)	N	None	None	5.0E+02	None	N/A	N/A	N/A
Guthion	N	None	1.0E-02	None	None	N/A	1.3E-02	N/A
Heptachlor	Y	5.2E-01	3.8E-03	7.9E-04	7.9E-04	6.2E-01	5.0E-03	2.7E-03
Heptachlor Epoxide	Y	5.2E-01	3.8E-03	3.9E-04	3.9E-04	6.2E-01	5.0E-03	1.4E-03
Hexachlorobenzene	Y	None	None	2.8E-03	2.9E-03	N/A	N/A	1.0E-02
Hexachlorobutadiene	Y	None	None	4.4E+00	1.8E+02	N/A	N/A	6.2E+02
Hexachlorocyclohexane Alpha-BHC	Y	None	None	2.6E-02	4.9E-02	N/A	N/A	1.7E-01
Hexachlorocyclohexane Beta-BHC	Y	None	None	9.1E-02	1.7E-01	N/A	N/A	5.9E-01
Hexachlorocyclohexane Gamma-BHC (Lindane)	Y	9.5E-01	None	9.8E-01	1.8E+00	1.1E+00	N/A	6.2E+00
Hexachlorocyclopentadiene	N	None	None	4.0E+01	1.1E+03	N/A	N/A	1.9E+03
Hexachloroethane	Y	None	None	1.4E+01	3.3E+01	N/A	N/A	1.1E+02
Hydrogen Sulfide	N	None	2.0E+00	None	None	N/A	2.6E+00	N/A
Indeno(1,2,3-cd)pyrene	Y	None	None	3.8E-02	1.8E-01	N/A	N/A	6.2E-01
Iron	N	None	None	3.0E+02	None	N/A	N/A	N/A
Isophorone	Y	None	None	9.5E+02	9.6E+03	N/A	N/A	3.3E+04
Kepone	N	None	Zero	None	None	N/A	Zero	N/A
Lead	N	3.4E+02	1.3E+01	1.5E+01	None	4.1E+02	6.0E+01	N/A
Malathion	N	None	1.0E-01	None	None	N/A	1.3E-01	N/A
Manganese	N	None	None	5.0E+01	None	N/A	N/A	N/A
Mercury	N	1.4E+00	7.7E-01	None	None	1.7E+00	1.0E+00	N/A
Methyl Bromide	N	None	None	4.7E+01	1.5E+03	N/A	N/A	2.6E+03
Methylene Chloride	Y	None	None	4.6E+01	5.9E+03	N/A	N/A	2.0E+04
Methoxychlor	N	None	3.0E-02	1.0E+02	None	N/A	3.9E-02	N/A
Mirex	N	None	Zero	None	None	N/A	Zero	N/A
Nickel	N	3.7E+02	4.1E+01	6.1E+02	4.6E+03	4.4E+02	5.3E+01	7.9E+03
Nitrate (as N)	N	None	None	1.0E+01 mg/L	None	N/A	N/A	N/A
Nitrobenzene	N	None	None	1.7E+01	6.9E+02	N/A	N/A	1.2E+03
N-Nitrosodimethylamine	Y	None	None	6.9E-03	3.0E+01	N/A	N/A	1.0E+02
N-Nitrosodiphenylamine	Y	None	None	3.3E+01	6.0E+01	N/A	N/A	2.1E+02
N-Nitrosodi-n-propylamine	Y	None	None	5.0E-02	5.1E+00	N/A	N/A	1.8E+01
Nonylphenol	N	2.8E+01	6.5E+00	None	None	3.3E+01	8.5E+00	N/A
Parathion	N	6.5E-02	1.3E-02	None	None	7.8E-02	1.7E-02	N/A
PCB Total	Y	None	1.4E-02	6.4E-04	6.4E-04	N/A	1.8E-02	2.2E-03
Pentachlorophenol	Y	7.8E+00	6.0E+00	2.7E+00	3.0E+01	9.1E+00	7.9E+00	1.0E+02
Phenol	N	None	None	1.0E+04	8.6E+05	N/A	N/A	1.5E+06
Pyrene	N	None	None	8.3E+02	4.0E+03	N/A	N/A	6.9E+03
Radium - Beta Part & Photon Act	N	None	None	4.0E+00 mrem/yr	4.0E+00 mrem/yr	N/A	N/A	5.9E+00
Radium - Gross Alpha Part Act	N	None	None	1.5E+01 pCi/L	None	N/A	N/A	N/A
Radium - Radium 226 + 228	N	None	None	5.0E+00 pCi/L	None	N/A	N/A	N/A
Radium - Uranium	N	None	None	3.0E+01	None	N/A	N/A	N/A
Selenium, Total Recoverable	N	2.0E+01	5.0E+00	1.7E+02	4.2E+03	2.4E+01	6.5E+00	7.2E+03
Silver	N	1.4E+01	None	None	None	1.7E+01	N/A	N/A
Sulfide	N	None	None	2.5E+02 mg/L	None	N/A	N/A	N/A
1,1,2,2-Tetrachloroethane	Y	None	None	1.7E+00	4.0E+01	N/A	N/A	1.4E+02
Tetrachloroethylene	Y		None	8.9E+00	3.3E+01	0.0E+00	N/A	1.1E+02
Thallium	N	None	None	2.4E-01	4.7E-01	N/A	N/A	8.1E-01
Toluene	N	None	None	5.1E+02	6.0E+03	N/A	N/A	1.0E+04
Total Dissolved Solids	N	None	None	5.0E+05	None	N/A	N/A	N/A
Toxaphene	Y	7.3E-01	2.0E-04	2.8E-03	2.8E-03	8.7E-01	2.8E-04	9.7E-03
Tributyltin	N	4.6E-01	7.2E-02	None	None	5.5E-01	9.4E-02	N/A
1,2,4-Trichlorobenzene	N	None	None	3.5E+01	7.0E+01	N/A	N/A	1.2E+02
1,1,2-Trichloroethane	Y	None	None	5.8E+00	1.6E+02	N/A	N/A	5.5E+02
Trichloroethylene	Y	None	None	2.5E+01	3.0E+02	N/A	N/A	1.0E+03
2,4,6-Trichlorophenol	Y	None	None	1.4E+01	2.4E+01	N/A	N/A	8.3E+01
2-(2,4,5-Trichlorophenoxy propionic acid (Silvex)	N	None	None	5.0E+01	None	N/A	N/A	N/A
Vinyl Chloride	Y	None	None	2.5E-01	2.4E+01	N/A	N/A	8.3E+01
Zinc	N	2.4E+02	2.4E+02	7.4E+03	2.6E+04	2.8E+02	3.1E+02	4.5E+04

PROTOCOL FOR THE EVALUATION OF THE EFFLUENT – TOXIC POLLUTANTS

Toxic pollutants were evaluated in accordance with OWP Guidance Memo No. 00-2011 (8/24/00). Acute and Chronic Waste Load Allocations (WLA_a and WLA_c) were analyzed according to the protocol below using a statistical approach (STAT.exe) to determine the necessity and magnitude of limits. Human Health Waste Load Allocations (WLA_{hh}) were analyzed according to the same protocol through a simple comparison with the effluent data. If the WLA_{hh} exceeded the effluent datum or data mean, no limits were required. If the effluent datum or data mean exceeded the WLA_{hh}, the WLA_{hh} was imposed as the limit.

Since there are no data available for any toxic pollutants immediately upstream of this discharge, all upstream (background) pollutant concentrations are assumed to be "0".

The steps used in evaluating the effluent data are as follows:

A. If all data are reported as "below detection" or < the required Quantification Level (QL), and at least one detection level is = the required QL, then the pollutant is considered to be not significantly present in the discharge and no further monitoring is required.

B. If all data are reported as "below detection", and all detection levels are > the required QL, then an evaluation is performed in which the pollutant is assumed present at the lowest reported detection level.

   B.1. If the evaluation indicates that no limits are needed, then the existing data set is adequate and no further monitoring is required.

   B.2. If the evaluation indicates that limits are needed, then the existing data set is inadequate to make a determination and additional monitoring is required.

C. If any data value is reported as detectable at or above the required QL, then the data are adequate to determine whether effluent limits are needed.

   C.1. If the evaluation indicates that no limits are needed, then no further monitoring is required.

   C.2. If the evaluation indicates that limits are needed, then the limits and associated requirements are specified in the draft permit.

   C.3. (Exception for Metals data only) If the evaluation indicates that limits are needed, but the data are reported as a form other than "Dissolved", then the existing data set is inadequate to make a determination and additional monitoring is required.

Parameter	CASRN	Type	QL (µg/L)	Data (µg/L unless noted otherwise)	Source of Data	Data Eval	
						1.1 MGD	1.5 MGD
Acenapthene	83-32-9	B	10	<5	a	A	A
Acrolein	107-02-8	V	---	<50	a	A	A
Acrylonitrile [C]	107-13-1	V	---	<50	a	A	A
Aldrin [C]	309-00-2	P	0.05	<0.05	a	A	A
Ammonia-N (mg/L)	766-41-7	X	0.2 mg/L	Default = 9 mg/L	b	C.2	C.2
Anthracene	120-12-7	B	10	<5	a	A	A
Antimony, dissolved	7440-36-0	M	0.2	<5	a	B.1	B.1
Arsenic, dissolved	7440-38-2	M	1.0	<5	a	B.1	B.1
Barium	7440-39-3	M	---	Applicable to PWS waters only	---	---	---
Benzene [C]	71-43-2	V	10	<5	a	A	A
Benzidine [C]	92-87-5	B	---	<5	a	A	A
Benzo (a) anthracene [C]	56-55-3	B	10	<5	a	A	A
Benzo (b) fluoranthene [C]	205-99-2	B	10	<5	a	A	A
Benzo (k) fluoranthene [C]	207-08-9	B	10	<5	a	A	A
Benzo (a) pyrene [C]	50-32-8	B	10	<5	a	A	A
Bis2-Chloroethyl Ether	111-44-4	B	---	<5	a	A	A
Bis2-Chloroisopropyl Ether	108-60-1	B	---	<5	a	A	A
Bis(2-ethylhexyl) Phthalate) [C]	117-81-7	B	10	<5	a	A	A
Bromoform [C]	75-25-2	V	10	<5	a	A	A
Butylbenzylphthalate	85-68-7	B	10	<5	a	A	A
dmium, dissolved	7440-43-9	M	0.3	<0.5	a	B.1	B.1
Carbon Tetrachloride [C]	56-23-5	V	10	<5	a	A	A
Chlordane [C]	57-74-9	P	0.2	<0.2	a	A	A
Chloride (mg/L)	16887-00-6	X	---	108	a	C.1	C.1
TRC (mg/L)	7782-50-5	X	0.1 mg/L	Default = 20 mg/L	b	C.2	C.2
Chlorobenzene	108-90-7	V	50	<5	a	A	A
Chlorodibromomethane [C]	124-48-1	V	10	<5	a	A	A
Chloroform	67-66-3	V	10	52	a	C.1	C.1
2-Chloronaphthalene	91-58-7	B	---	<5	a	A	A
2-Chlorophenol	95-57-8	A	10	<5	a	A	A
Chlorpyrifos	2921-88-2	P	---	<0.2	a	A	A
Chromium III, dissolved	16065-83-1	M	0.5	<3	a	B.1	B.1
Chromium VI, dissolved	18540-29-9	M	0.5	<3	a	B.1	B.1
Chromium, Total	7440-47-3	M	---	Applicable to PWS waters only	---	---	---
Chrysene [C]	218-01-9	B	10	<5	a	A	A
Copper, dissolved	7440-50-8	M	0.5	<5	a	A	A
Cyanide, Free	57-12-5	X	10	<5	a	A	A
DDD [C]	72-54-8	P	0.1	<0.05	a	A	A
DDE [C]	72-55-9	P	0.1	<0.05	a	A	A
DDT [C]	50-29-3	P	0.1	<0.05	a	A	A
Demeton	8065-48-3	P	---	<1	a	A	A

Parameter	CASRN	Type	QL (µg/L)	Data (µg/L unless noted otherwise)	Source of Data	Data Eval. 1.1 MGD	Data Eval. 1.5 [redacted]
Diazinon	333-41-5	P	---	NEW REQUIREMENT. Needs to be sampled.			
Dibenz(a,h)anthracene [C]	53-70-3	B	20	<5	a	A	A
1,2-Dichlorobenzene	95-50-1	B	10	<5	a	A	A
1,3-Dichlorobenzene	541-73-1	B	10	<5	a	A	A
1,4-Dichlorobenzene	106-46-7	B	10	<5	a	A	A
3,3-Dichlorobenzidine [C]	91-94-1	B	---	<5	a	A	A
Dichlorobromomethane [C]	75-27-4	V	10	<5	a	A	A
1,2-Dichloroethane [C]	107-06-2	V	10	<5	a	A	A
1,1-Dichloroethylene	75-35-4	V	10	<5	a	A	A
1,2-trans-dichloroethylene	156-60-5	V	---	<5	a	A	A
2,4-Dichlorophenol	120-83-2	A	10	<5	a	A	A
2,4-Dichlorophenoxy acetic acid (syn. = 2,4-D)	94-75-7	P	---	Applicable to PWS waters only	---	---	---
1,2-Dichloropropane [C]	78-87-5	V	---	<5	a	A	A
1,3-Dichloropropene [C]	542-75-6	V	---	<5	a	A	A
Dieldrin [C]	60-57-1	P	---	<0.05	a	A	A
Diethyl Phthalate	84-66-2	B	10	<5	a	A	A
2,4-Dimethylphenol	105-67-9	A	10	<5	a	A	A
Dimethyl Phthalate	131-11-3	B	---	<5	a	A	A
2,4 Dinitrophenol	51-28-5	A	---	<20	a	A	A
2-Methyl-4,6-Dinitrophenol	534-52-1	A	---	<5	a	A	[redacted]
2,4-Dinitrotoluene [C]	121-14-2	B	10	<5	a	A	[redacted]
Dioxin (2,3,7,8-tetrachlorodibenzo-p-dioxin)	1746-01-6	X	0.01	Applicable to Paper Mills & Oil Refineries only	---	---	---
1,2-Diphenylhydrazine [C]	122-66-7	B	---	<5	a	A	A
Alpha-Endosulfan (I)	959-98-8	P	---	<0.05	a	A	A
Beta-Endosulfan (II)	33213-65-9	P	---	<0.05	a	A	A
Alpha-Endosulfan + Beta-Endosulfan		P	---	<0.10	a	A	A
Endosulfan Sulfate	1031-07-8	P	---	<0.05	a	A	A
Endrin	72-20-8	P	0.1	<0.05	a	A	A
Endrin Aldehyde	7421-93-4	P	---	<0.05	a	A	A
Ethylbenzene	100-41-4	V	10	<5	a	A	A
Fluoranthene	206-44-0	B	10	<5	a	A	A
Fluorene	86-73-7	B	10	<5	a	A	A
Foaming Agents		X	---	Applicable to PWS waters only	---	---	---
Guthion	86-50-0	P	---	<1	a	A	A
Heptachlor [C]	76-44-8	P	0.05	<0.05	a	A	A
Heptachlor Epoxide [C]	1024-57-3	P	---	<0.05	a	A	A
Hexachlorobenzene [C]	118-74-1	B	---	<5	a	A	A
Hexachlorobutadiene [C]	87-68-3	B	---	<5	a	A	A
Hexachlorocyclohexane Alpha-BHC [C]	319-84-6	P	---	<0.05	a	A	A
Hexachlorocyclohexane Beta-BHC [C]	319-85-7	P	---	<0.05	a	A	A
Hexachlorocyclohexane Gamma-BHC [C] (syn. = Lindane)	58-89-9	P	---	<0.05	a	A	[redacted]

Parameter	CASRN	Type	QL (µg/L)	Data (µg/L unless noted otherwise)	Source of Data	Data Eval	
						15 MGD	15 MGD
Hexachlorocyclopentadiene	77-47-4	B	---	<5	a	A	A
Hexachloroethane [C]	67-72-1	B	---	<5	a	A	A
Hydrogen Sulfide	7783-06-4	X	---	<608		A	A
Indeno (1,2,3-cd) pyrene [C]	193-39-5	B	20	<5	a	B.1	B.1
Iron, dissolved	7439-89-6	M	1.0	Applicable to PWS waters only	---	---	---
Isophorone [C]	78-59-1	B	10	<5	a	A	A
Kepone	143-50-0	P	---	<5	a	A	A
Lead, dissolved	7439-92-1	M	0.5	<5	a	A	A
Malathion	121-75-5	P	---	<1	a	A	A
Manganese	7439-96-5	M	0.2	Applicable to PWS waters only	---	---	---
Mercury, dissolved	7439-97-6	M	1.0	<0.2	a	A	A
Methyl Bromide	74-83-9	V	---	<10	a	A	A
Methylene Chloride [C]	75-09-2	V	20	<5	a	A	A
Methoxychlor	72-43-5	P	---	<0.05	a	A	A
Mirex	2385-85-5	P	---	<0.05	a	A	A
Nickel, dissolved	7440-02-0	M	0.5	<5	a	B.1	B.1
Nitrate (as N)	14797-55-8	X	---	Applicable to PWS waters only	---	---	---
Nitrobenzene	98-95-3	B	10	<5	a	A	A
N-Nitrosodimethylamine [C]	62-75-9	B	---	<5	a	A	A
N-Nitrosodiphenylamine [C]	86-30-6	B	---	<5	a	A	A
N-Nitrosodi-n-propylamine [C]	621-64-7	B	---	<5	a	A	A
Nonylphenol	104-40-51	A	---	**NEW REQUIREMENT. Needs to be sampled.**			
Parathion	56-38-2	P	---	<1	a	A	A
PCB Total [C]	1336-36-3	p	---	<0.5	a	A	A
Pentachlorophenol [C]	87-86-5	A	50	<10	a	A	A
Phenol	108-95-2	A	10	<5	a	A	A
Pyrene	129-00-0	B	10	<5	a	A	A
Beta Particle & Photon Activity (mrem/yr)		R	---	31.8 pCi/L	a	C.1	C.1
Combined Radium 226 and 228 (pCi/L)		R	---	**NEW REQUIREMENT. Needs to be sampled.**			
Gross Alpha Particle Activity (pCi/L)		R	---	<2.0	a	A	A
Uranium		R	---	**NEW REQUIREMENT. Needs to be sampled.**			
Selenium, total recoverable	7782-49-2	M	2.0	<1	a	A	A
Silver, dissolved	7440-22-4	M	0.2	<1	a	B.1	B.1
Sulfate	14808-79-8	X	---	Applicable to PWS waters only	---	---	---
1,1,2,2-Tetrachloroethane [C]	79-34-5	V	---	<5	a	A	A
Tetrachloroethylene [C]	127-18-4	V	10	<5	a	A	A
Thallium, dissolved	7440-28-0	M	---	<5	a	A	A
Toluene	10-88-3	V	10	<5	a	A	A
Total dissolved solids		X	---	Applicable to PWS waters only	---	---	---
Toxaphene [C]	8001-35-2	P	5.0	<0.5	a	A	A
Tributyltin	60-10-5	P	---	<0.025	a	A	A

Parameter	CASRN	Type	QL (µg/L)	Data (µg/L unless noted otherwise)	Source of Data	Data Eval	
						1.1 MGD	1.5 M
1,2,4-Trichlorobenzene	120-82-1	B	10	<5	a	A	A
1,1,2-Trichloroethane [C]	79-00-5	V	---	<5	a	A	A
Trichloroethylene [C]	79-01-6	V	10	<5	a	A	A
2,4,6-Trichlorophenol [C]	88-06-2	A	10	<5	a	A	A
2-(2,4,5-Trichlorophenoxy) propionic acid (synonym = Silvex)	93-72-1	P	---	Applicable to PWS waters only	---	---	---
Vinyl Chloride [C]	75-01-4	V	10	<10	a	A	A
Zinc, dissolved	7440-66-6	M	2.0	57	a	C.1	C.1

"Type" column indicates a category assigned to the referenced substance (see below):
A = Acid Extractable Organic Compounds
B = Base/Neutral Extractable Organic Compounds
M = Metals
p = PCBs
P = Pesticides
V = Volatile Organic Compounds
X = Miscellaneous Compounds and Parameters

The **superscript "C"** following the parameter name indicates that the substance is a known or suspected carcinogen; human health criteria at risk level 10^{-5}.

CASRN = Chemical Abstract Service Registry Number for each parameter is referenced in the current Water Quality Standards. A unique numeric identifier designating only one substance. The Chemical Abstract Service is a division of the American Chemical Society.

"Source of Data" codes:
a = Permittee monitoring performed September 10, 2008
b = Agency default values

"Data Evaluation" codes:
See section titled "PROTOCOL FOR THE EVALUATION OF EFFLUENT TOXIC POLLUTANTS" (preceding the parameter table) for an explanation of the code used.

STAT.EXE Results – 1.1 MGD Flow Tier

Ammonia-N

Chronic averaging period = 30
WLAa = 33
WLAc = 4.1
Q.L. = 0.2
# samples/mo. = 4
# samples/wk. = 1

Summary of Statistics:
observations = 1
Expected Value = 9
Variance = 29.16
C.V. = 0.6
97th percentile daily values = 21.9007
97th percentile 4 day average = 14.9741
97th percentile 30 day average= 10.8544
< Q.L. = 0
Model used = BPJ Assumptions, type 2 data

A limit is needed based on Chronic Toxicity
Maximum Daily Limit = 8.27244738300687
Average Weekly Limit = 8.27244738300688
Average Monthly Limit = 5.65608505848942

The data are: 9

TRC

Chronic averaging period = 4
WLAa = 0.024
WLAc = 0.016
Q.L. = 0.1
# samples/mo. = 30
# samples/wk. = 7

Summary of Statistics:
observations = 1
Expected Value = 20
Variance = 144
C.V. = 0.6
97th percentile daily values = 48.6683
97th percentile 4 day average = 33.2758
97th percentile 30 day average= 24.1210
< Q.L. = 0
Model used = BPJ Assumptions, type 2 data

A limit is needed based on Chronic Toxicity
Maximum Daily Limit = 2.34011965448517E-02
Average Weekly Limit = 1.42912793765616E-02
Average Monthly Limit = 1.15981282674557E-02

The data are: 20

STAT.EXE Results – 1.5 MGD Flow Tier

Ammonia-N

Chronic averaging period = 30
WLAa = 32
WLAc = 3.8
Q.L. = 0.2
# samples/mo. = 4
# samples/wk. = 1

Summary of Statistics:
observations = 1
Expected Value = 9
Variance = 29.16
C.V. = 0.6
97th percentile daily values = 21.9007
97th percentile 4 day average = 14.9741
97th percentile 30 day average= 10.8544
< Q.L. = 0
Model used = BPJ Assumptions, type 2 data

A limit is needed based on Chronic Toxicity
Maximum Daily Limit = 7.66714635498198
Average Weekly Limit = 7.66714635498198
Average Monthly Limit = 5.24222517616092
The data are: 9

Arsenic

Chronic averaging period = 4
WLAa = 410
WLAc = 200
Q.L. = 1.0
# samples/mo. = 1
# samples/wk. = 1

Summary of Statistics:
observations = 1
Expected Value = 5
Variance = 9
C.V. = 0.6
97th percentile daily values = 12.1670
97th percentile 4 day average = 8.31895
97th percentile 30 day average= 6.03026
< Q.L. = 0
Model used = BPJ Assumptions, type 2 data

No Limit is required for this material

The data are: 5

Cadmium

Chronic averaging period = 4
WLAa = 12
WLAc = 2.8
Q.L. = 0.3
# samples/mo. = 1
# samples/wk. = 1

Summary of Statistics:
observations = 1
Expected Value = .5
Variance = .09
C.V. = 0.6
97th percentile daily values = 1.21670
97th percentile 4 day average = .831895
97th percentile 30 day average= .603026
< Q.L. = 0
Model used = BPJ Assumptions, type 2 data

No Limit is required for this material

The data are: 0.5

Chloride

Chronic averaging period = 4
WLAa = 1000
WLAc = 300
Q.L. = 1
# samples/mo. = 1
# samples/wk. = 1

Summary of Statistics:
observations = 1
Expected Value = 108
Variance = 4199.04
C.V. = 0.6
97th percentile daily values = 262.809
97th percentile 4 day average = 179.689
97th percentile 30 day average= 130.253
< Q.L. = 0
Model used = BPJ Assumptions, type 2 data

No Limit is required for this material

The data are: 108

Chromium III

Chronic averaging period = 4
WLAa = 1300
WLAc = 190
Q.L. = 0.5
# samples/mo. = 1
# samples/wk. = 1

Summary of Statistics:
observations = 1
Expected Value = 3
Variance = 3.24
C.V. = 0.6
97th percentile daily values = 7.30025
97th percentile 4 day average = 4.99137
97th percentile 30 day average= 3.61815
< Q.L. = 0
Model used = BPJ Assumptions, type 2 data

No Limit is required for this material

The data are: 3

Chromium VI

Chronic averaging period = 4
WLAa = 19
WLAc = 14
Q.L. = 0.5
# samples/mo. = 1
# samples/wk. = 1

Summary of Statistics:

observations = 1
Expected Value = 3
Variance = 3.24
C.V. = 0.6
97th percentile daily values = 7.30025
97th percentile 4 day average = 4.99137
97th percentile 30 day average= 3.61815
< Q.L. = 0
Model used = BPJ Assumptions, type 2 data

No Limit is required for this material

The data are: 3

Copper

Chronic averaging period = 4
WLAa = 35
WLAc = 24
Q.L. = 0.5
# samples/mo. = 1
# samples/wk. = 1

Summary of Statistics:

observations = 1
Expected Value = 5
Variance = 9
C.V. = 0.6
97th percentile daily values = 12.1670
97th percentile 4 day average = 8.31895
97th percentile 30 day average= 6.03026
< Q.L. = 0
Model used = BPJ Assumptions, type 2 data

No Limit is required for this material

The data are: 5

Lead

Chronic averaging period = 4
WLAa = 410
WLAc = 50
Q.L. = 0.5
# samples/mo. = 1
# samples/wk. = 1

Summary of Statistics:
observations = 1
Expected Value = 5
Variance = 9
C.V. = 0.6
97th percentile daily values = 12.1670
97th percentile 4 day average = 8.31895
97th percentile 30 day average= 6.03026
< Q.L. = 0
Model used = BPJ Assumptions, type 2 data

No Limit is required for this material

The data are: 5

Nickel

Chronic averaging period = 4
WLAa = 440
WLAc = 53
Q.L. = 0.5
# samples/mo. = 1
# samples/wk. = 1

Summary of Statistics:
observations = 1
Expected Value = 5
Variance = 9
C.V. = 0.6
97th percentile daily values = 12.1670
97th percentile 4 day average = 8.31895
97th percentile 30 day average= 6.03026
< Q.L. = 0
Model used = BPJ Assumptions, type 2 data

No Limit is required for this material

The data are: 5

Silver

Chronic averaging period = 4
WLAa = 17
WLAc =
Q.L. = 0.2
# samples/mo. = 1
# samples/wk. = 1

Summary of Statistics:

observations = 1
Expected Value = 1
Variance = .36
C.V. = 0.6
97th percentile daily values = 2.43341
97th percentile 4 day average = 1.66379
97th percentile 30 day average= 1.20605
< Q.L. = 0
Model used = BPJ Assumptions, type 2 data

No Limit is required for this material

The data are: 1

TRC

Chronic averaging period = 4
WLAa = 0.023
WLAc = 0.014
Q.L. = 0.1
# samples/mo. = 30
# samples/wk. = 7

Summary of Statistics:
observations = 1
Expected Value = 20
Variance = 144
C.V. = 0.6
97th percentile daily values = 48.6683
97th percentile 4 day average = 33.2758
97th percentile 30 day average= 24.1210
< Q.L. = 0
Model used = BPJ Assumptions, type 2 data

A limit is needed based on Chronic Toxicity
Maximum Daily Limit = 2.04760469767452E-02
Average Weekly Limit = 1.25048694544914E-02
Average Monthly Limit = 1.01483622340237E-02

The data are: 20

Zinc

Chronic averaging period = 4
WLAa = 280
WLAc = 310
Q.L. = 2
# samples/mo. = 1
# samples/wk. = 1

Summary of Statistics:

observations = 1
Expected Value = 57
Variance = 1169.64
C.V. = 0.6
97th percentile daily values = 138.704
97th percentile 4 day average = 94.8360
97th percentile 30 day average= 68.7450
< Q.L. = 0
Model used = BPJ Assumptions, type 2 data

No Limit is required for this material

The data are: 57

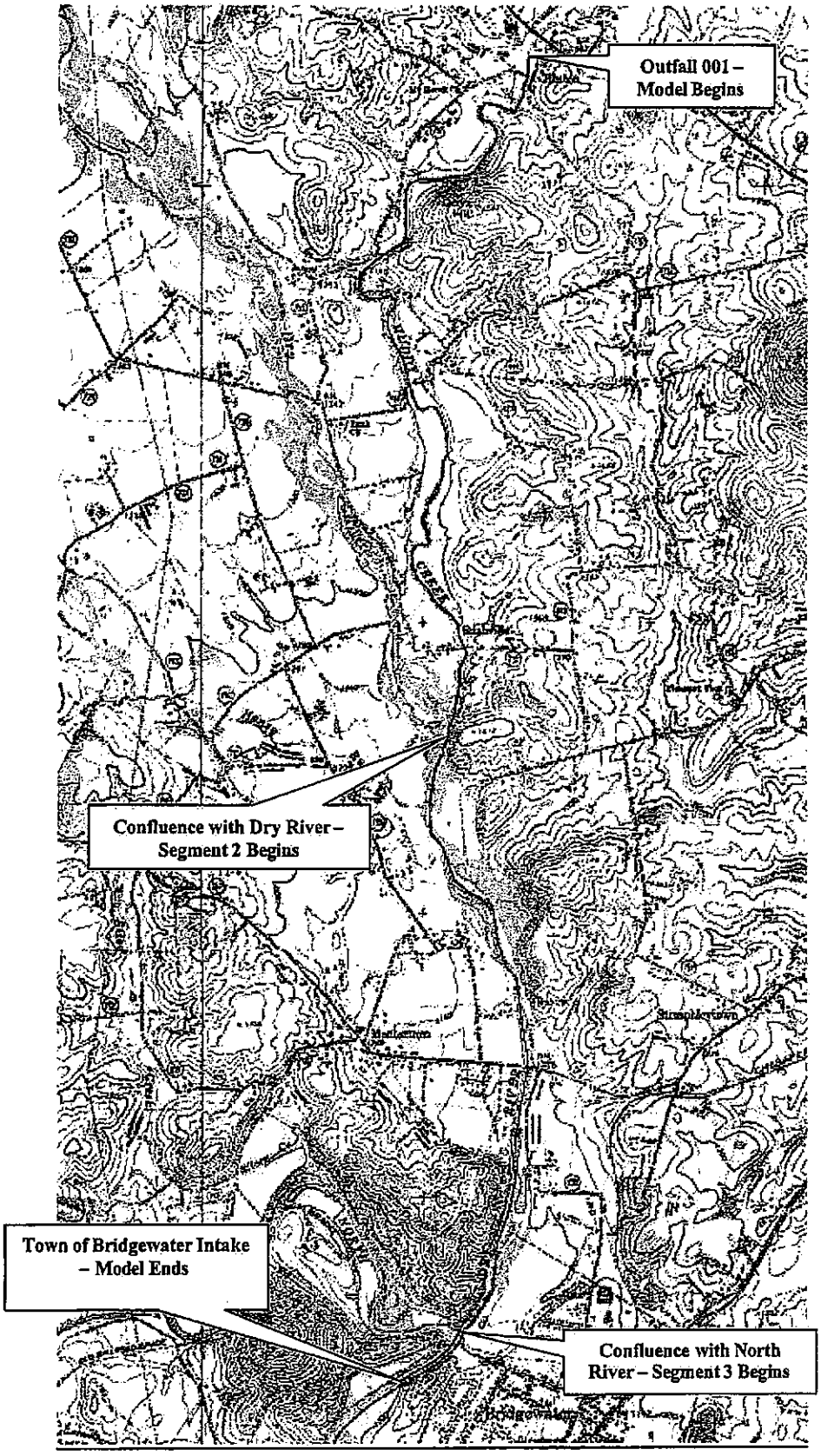
Regional Stream Modeling Information

Segmentation and General Discussion:

Segment #	Starts at:	Elev. (ft)	Length (mi)	Inputs
1	Virginia Poultry Growers Cooperative-Hinton	1342	3.66	Design Flow = 1.1 MGD $CBOD_5$ = 10 mg/L TKN = 5.9 mg/L DO = 6 mg/L Temp = 23.4 C Design Flow = 1.5 MGD $CBOD_5$ = 9.2 mg/L TKN = 5.9 mg/L DO = 6 mg/L Temp = 23.4 C
2	Confluence with Dry River	1308	2.59	Flow = 0 MGD
3	Confluence with North River	1184	0.33	Flow = 6.83 MGD Temp = 23.7 C
Model ends	Town of Bridgewater Water Intake	1180		

- The model was stopped at the Town of Bridgewater Intake. The $CBOD_u$ and DO concentrations had reached background concentrations at this point. Also, there is no evidence to indicate that stabilization of the remaining $nBOD_u$ will cause a reduction in the dissolved oxygen concentration below WQS requirements.

Map of Modeled Segments:



Modeling Input Data– 1.1 MGD Flow Tier:

REGIONAL MODELING SYSTEM VERSION 4.11

File Information
Date Modified: September 18, 2009

Water Quality Standards Information
Stream Name: MUDDY CREEK
River Basin: Potomac/Shenandoah Rivers Basin
Section: 5
Class: IV - Mountainous Zones Waters
Special Standards: pH

Background Flow Information
Gauge Used: FFD dated 5/11/09
Gauge Drainage Area: 28.9 Sq.Mi.
Gauge 7Q10 Flow: 0.54 MGD
Headwater Drainage Area: 28.9 Sq.Mi.
Headwater 7Q10 Flow: 0.54 MGD (Net; includes Withdrawals/Discharges)
Withdrawal/Discharges: 0 MGD
Incremental Flow in Segments: 1.868512E-02 MGD/Sq.Mi.

Background Water Quality
Background Temperature: 23.7 Degrees C
Background cBOD5: 2 mg/l
Background TKN: 0 mg/l
Background D.O.: 7.304945 mg/l

Model Segmentation
Number of Segments: 3
Model Start Elevation: 1342 ft above MSL
Model End Elevation: 1180 ft above MSL

Segment Information for Segment 1

Definition Information
Segment Definition: A discharge enters.
Discharge Name: VIRGINIA POULTRY GROWERS COOPERATIVE-HINTON
VPDES Permit No.: VA0002313

Discharger Flow Information
Flow: 1.1 MGD
cBOD5: 10 mg/l
TKN: 5.9 mg/l
D.O.: 6 mg/l
Temperature: 23.4 Degrees C

Geographic Information
Segment Length: 3.66 miles
Upstream Drainage Area: 28.9 Sq.Mi.
Downstream Drainage Area: 28.9 Sq.Mi.
Upstream Elevation: 1342 Ft.
Downstream Elevation: 1308 Ft.

Hydraulic Information
Segment Width: 17 Ft.
Segment Depth: 0.363 Ft.
Segment Velocity: 0.412 Ft./Sec.
Segment Flow: 1.64 MGD
Incremental Flow: 0 MGD (Applied at end of segment.)

Channel Information
Cross Section: Irregular
Character: Moderately Meandering
Pool and Riffle: Yes
Percent Pools: 70
Percent Riffles: 30
Pool Depth: 0.4 Ft.
Riffle Depth: 0.25 Ft.
Bottom Type: Silt
Sludge: None
Plants: None
Algae: Only On Edges

Segment Information for Segment 2

Definition Information
Segment Definition: A tributary enters.
Tributary Name: DRY RIVER

Tributary Flow Information
Flow: 0 MGD
cBOD5: 2 mg/l
TKN: 0 mg/l
D.O.: 7.314 mg/l
Temperature: 23.7 Degrees C

Geographic Information
Segment Length: 2.59 miles
Upstream Drainage Area: 115.42 Sq.Mi.
Downstream Drainage Area: 115.42 Sq.Mi.
Upstream Elevation: 1308 Ft.
Downstream Elevation: 1184 Ft.

Hydraulic Information
Segment Width: 20 Ft.
Segment Depth: 0.36 Ft.
Segment Velocity: 0.35 Ft./Sec.
Segment Flow: 1.64 MGD
Incremental Flow: 0 MGD (Applied at end of segment.)

Channel Information
Cross Section: Irregular
Character: Moderately Meandering
Pool and Riffle: Yes
Percent Pools: 70
Percent Riffles: 30
Pool Depth: 0.4 Ft.
Riffle Depth: 0.25 Ft.
Bottom Type: Small Rock
Sludge: None
Plants: None
Algae: Only On Edges

Segment Information for Segment 3

Definition Information
Segment Definition: A tributary enters.
Tributary Name: NORTH RIVER

Tributary Flow Information
Flow: 6.83 MGD
cBOD5: 2 mg/l
TKN: 0 mg/l
D.O.: 7.347 mg/l
Temperature: 23.7 Degrees C

Geographic Information
Segment Length: 0.33 miles
Upstream Drainage Area: 293.42 Sq.Mi.
Downstream Drainage Area: 293.42 Sq.Mi.
Upstream Elevation: 1184 Ft.
Downstream Elevation: 1180 Ft.

Hydraulic Information
Segment Width: 150 Ft.
Segment Depth: 5 Ft.
Segment Velocity: 0.018 Ft./Sec.
Segment Flow: 8.47 MGD
Incremental Flow: 0 MGD (Applied at end of segment.)

Channel Information
Cross Section: Rectangular
Character: Mostly Straight
Pool and Riffle: No
Bottom Type: Silt
Sludge: None
Plants: None
Algae: On Entire Bottom

Model Output:

Model is for MUDDY CREEK.
Model starts at the VIRGINIA POULTRY GROWERS COOPERATIVE-HINTON discharge.

Background Data

7Q10 (mgd)	cBOD5 (mg/l)	TKN (mg/l)	DO (mg/l)	Temp deg C
0.54	2	0	7.305	23.7

Discharge/Tributary Input Data for Segment 1

Flow (mgd)	cBOD5 (mg/l)	TKN (mg/l)	DO (mg/l)	Temp deg C
1.1	10	5.9	6	23.4

Hydraulic Information for Segment 1

Length (mi)	Width (ft)	Depth (ft)	Velocity (ft/sec)
3.66	17	0.363	0.412

Initial Mix Values for Segment 1

Flow (mgd)	DO (mg/l)	cBOD (mg/l)	nBOD (mg/l)	DOSat (mg/l)	Temp deg C
1.64	6.43	18.415	8.422	8.149	23.49878

Rate Constants for Segment 1.- (All units Per Day)

k1	k1@T	k2	k2@T	kn	kn@T	BD	BD@T
1	1.174	5.574	6.056	0.3	0.393	0	0

Output for Segment 1
Segment starts at VIRGINIA POULTRY GROWERS COOPERATIVE-HINTON

Total Dist. (mi)	Segm. Dist. (mi)	DO (mg/l)	cBOD (mg/l)	nBOD (mg/l)
0	0	6.43	18.415	8.422
0.1	0.1	6.227	18.097	8.373
0.2	0.2	6.047	17.785	8.324
0.3	0.3	5.888	17.478	8.276
0.4	0.4	5.748	17.176	8.228
0.5	0.5	5.625	16.879	8.18
0.6	0.6	5.518	16.588	8.132
0.7	0.7	5.425	16.302	8.085
0.8	0.8	5.345	16.021	8.038
0.9	0.9	5.277	15.744	7.991
1	1	5.219	15.472	7.945
1.1	1.1	5.171	15.205	7.899
1.2	1.2	5.132	14.942	7.853
1.3	1.3	5.101	14.684	7.807
1.4	1.4	5.077	14.43	7.762
1.5	1.5	5.06	14.181	7.717
1.6	1.6	5.048	13.936	7.672
1.7	1.7	5.042	13.695	7.627
1.8	1.8	5.04	13.459	7.583
1.9	1.9	5.043	13.227	7.539
2	2	5.05	12.999	7.495
2.1	2.1	5.06	12.775	7.451
2.2	2.2	5.073	12.554	7.408
2.3	2.3	5.089	12.337	7.365
2.4	2.4	5.107	12.124	7.322

2.5	2.5	5.128	11.915	7.279
2.6	2.6	5.15	11.709	7.237
2.7	2.7	5.174	11.507	7.195
2.8	2.8	5.2	11.308	7.153
2.9	2.9	5.227	11.113	7.111
3	3	5.255	10.921	7.07
3.1	3.1	5.284	10.732	7.029
3.2	3.2	5.314	10.547	6.988
3.3	3.3	5.345	10.365	6.947
3.4	3.4	5.376	10.186	6.907
3.5	3.5	5.408	10.01	6.867
3.6	3.6	5.44	9.837	6.827
3.66	3.66	5.459	9.735	6.803

Discharge/Tributary Input Data for Segment 2

Flow (mgd)	cBOD5 (mg/l)	TKN (mg/l)	DO (mg/l)	Temp deg C
0	2	0	7.314	23.7

Incremental Flow Input Data for Segment 2

Flow (mgd)	cBOD5 (mg/l)	TKN (mg/l)	DO (mg/l)	Temp deg C
0	2	0	7.356	23.7

Hydraulic Information for Segment 2

Length (mi)	Width (ft)	Depth (ft)	Velocity (ft/sec)
2.59	20	0.36	0.35

Initial Mix Values for Segment 2

Flow (mgd)	DO (mg/l)	cBOD (mg/l)	nBOD (mg/l)	DOSat (mg/l)	Temp deg C
1.64	5.459	9.735	6.803	8.173	23.49878

Rate Constants for Segment 2. - (All units Per Day)

k1	k1@T	k2	k2@T	kn	kn@T	BD	BD@T
0.8	0.939	20	21.73	0.4	0.524	0	0

Output for Segment 2
Segment starts at DRY RIVER

Total Dist. (mi)	Segm. Dist. (mi)	DO (mg/l)	cBOD (mg/l)	nBOD (mg/l)
3.66	0	5.459	9.735	6.803
3.76	0.1	6.133	9.577	6.741
3.86	0.2	6.596	9.421	6.68
3.96	0.3	6.916	9.268	6.619
4.06	0.4	7.137	9.117	6.559
4.16	0.5	7.291	8.969	6.499
4.26	0.6	7.356	8.823	6.44
4.36	0.7	7.356	8.679	6.381
4.46	0.8	7.356	8.538	6.323
4.56	0.9	7.356	8.399	6.265
4.66	1	7.356	8.262	6.208
4.76	1.1	7.356	8.128	6.152
4.86	1.2	7.356	7.996	6.096
4.96	1.3	7.356	7.866	6.041
5.06	1.4	7.356	7.738	5.986

5.16	1.5	7.356	7.612	5.932
5.26	1.6	7.356	7.488	5.878
5.36	1.7	7.356	7.366	5.825
5.46	1.8	7.356	7.246	5.772
5.56	1.9	7.356	7.128	5.719
5.66	2	7.356	7.012	5.667
5.76	2.1	7.356	6.898	5.615
5.86	2.2	7.356	6.786	5.564
5.96	2.3	7.356	6.676	5.513
6.06	2.4	7.356	6.567	5.463
6.16	2.5	7.356	6.46	5.413
6.25	2.59	7.356	6.365	5.369

Discharge/Tributary Input Data for Segment 3

Flow (mgd)	cBOD5 (mg/l)	TKN (mg/l)	DO (mg/l)	Temp deg C
6.83	2	0	7.347	23.7

Incremental Flow Input Data for Segment 3

Flow (mgd)	cBOD5 (mg/l)	TKN (mg/l)	DO (mg/l)	Temp deg C
0	2	0	7.353	23.7

Hydraulic Information for Segment 3

Length (mi)	Width (ft)	Depth (ft)	Velocity (ft/sec)
0.33	150	5	0.018

Initial Mix Values for Segment 3

Flow (mgd)	DO (mg/l)	cBOD (mg/l)	nBOD (mg/l)	DOSat (mg/l)	Temp deg C
8.47	7.349	5.264	1.04	8.17	23.66104

Rate Constants for Segment 3. - (All units Per Day)

k1	k1@T	k2	k2@T	kn	kn@T	BD	BD@T
0.5	0.592	7.273	7.933	0.15	0.199	0	0

Output for Segment 3
Segment starts at NORTH RIVER

Total Dist. (mi)	Segm. Dist. (mi)	DO (mg/l)	cBOD (mg/l)	nBOD (mg/l)	
6.25	0	7.349	5.264	1.04	
6.35	0.1	7.353	5	0.972	
6.45	0.2	7.353	5	0.909	
6.55	0.3	7.353	5	0.85	
6.58	0.33	7.353	5	0.833	END OF FILE

Modeling Input Data – 1.5 MGD Flow Tier:

REGIONAL MODELING SYSTEM VERSION 4.11

File Information
Date Modified: September 18, 2009

Water Quality Standards Information
Stream Name: MUDDY CREEK
River Basin: Potomac/Shenandoah Rivers Basin
Section: 5
Class: IV - Mountainous Zones Waters
Special Standards: pH

Background Flow Information
Gauge Used: FFD dated 5/11/09
Gauge Drainage Area: 28.9 Sq.Mi.
Gauge 7Q10 Flow: 0.54 MGD
Headwater Drainage Area: 28.9 Sq.Mi.
Headwater 7Q10 Flow: 0.54 MGD (Net; includes Withdrawals/Discharges)
Withdrawal/Discharges: 0 MGD
Incremental Flow in Segments: 1.868512E-02 MGD/Sq.Mi.

Background Water Quality
Background Temperature: 23.7 Degrees C
Background cBOD5: 2 mg/l
Background TKN: 0 mg/l
Background D.O.: 7.304945 mg/l

Model Segmentation
Number of Segments: 3
Model Start Elevation: 1342 ft above MSL
Model End Elevation: 1180 ft above MSL

Segment Information for Segment 1

Definition Information
Segment Definition: A discharge enters.
Discharge Name: VIRGINIA POULTRY GROWERS COOPERATIVE-HINTON
VPDES Permit No.: VA0002313

Discharger Flow Information
Flow: 1.5 MGD
cBOD5: 9.2 mg/l
TKN: 5.9 mg/l
D.O.: 6 mg/l
Temperature: 23.4 Degrees C

Geographic Information
Segment Length: 3.66 miles
Upstream Drainage Area: 28.9 Sq.Mi.
Downstream Drainage Area: 28.9 Sq.Mi.
Upstream Elevation: 1342 Ft.
Downstream Elevation: 1308 Ft.

Hydraulic Information
Segment Width: 17 Ft.
Segment Depth: 0.41 Ft.
Segment Velocity: 0.44 Ft./Sec.
Segment Flow: 2.04 MGD
Incremental Flow: 0 MGD (Applied at end of segment.)

Channel Information
Cross Section: Irregular
Character: Moderately Meandering
Pool and Riffle: Yes
Percent Pools: 70
Percent Riffles: 30
Pool Depth: 0.43 Ft.
Riffle Depth: 0.25 Ft.
Bottom Type: Silt
Sludge: None
Plants: None
Algae: Only On Edges

Segment Information for Segment 2

Definition Information
Segment Definition: A tributary enters.
Tributary Name: DRY RIVER

Tributary Flow Information
Flow: 0 MGD
cBOD5: 2 mg/l
TKN: 0 mg/l
D.O.: 7.314 mg/l
Temperature: 23.7 Degrees C

Geographic Information
Segment Length: 2.59 miles
Upstream Drainage Area: 115.42 Sq.Mi.
Downstream Drainage Area: 115.42 Sq.Mi.
Upstream Elevation: 1308 Ft.
Downstream Elevation: 1184 Ft.

Hydraulic Information
Segment Width: 20 Ft.
Segment Depth: 0.4 Ft.
Segment Velocity: 0.39 Ft./Sec.
Segment Flow: 2.04 MGD
Incremental Flow: 0 MGD (Applied at end of segment.)

Channel Information
Cross Section: Irregular
Character: Moderately Meandering
Pool and Riffle: Yes
Percent Pools: 70
Percent Riffles: 30
Pool Depth: 0.43 Ft.
Riffle Depth: 0.25 Ft.
Bottom Type: Small Rock
Sludge: None
Plants: None
Algae: Only On Edges

Segment Information for Segment 3

Definition Information
Segment Definition: A tributary enters.
Tributary Name: NORTH RIVER

Tributary Flow Information
Flow: 6.83 MGD
cBOD5: 2 mg/l
TKN: 0 mg/l
D.O.: 7.347 mg/l
Temperature: 23.7 Degrees C

Geographic Information
Segment Length: 0.33 miles
Upstream Drainage Area: 293.42 Sq.Mi.
Downstream Drainage Area: 293.42 Sq.Mi.
Upstream Elevation: 1184 Ft.
Downstream Elevation: 1180 Ft.

Hydraulic Information
Segment Width: 150 Ft.
Segment Depth: 5 Ft.
Segment Velocity: 0.018 Ft./Sec.
Segment Flow: 8.87 MGD
Incremental Flow: 0 MGD (Applied at end of segment.)

Channel Information
Cross Section: Rectangular
Character: Mostly Straight
Pool and Riffle: No
Bottom Type: Silt
Sludge: None
Plants: None
Algae: On Entire Bottom

Model Output:

Model is for MUDDY CREEK.
Model starts at the VIRGINIA POULTRY GROWERS COOPERATIVE-HINTON discharge.

Background Data

7Q10 (mgd)	cBOD5 (mg/l)	TKN (mg/l)	DO (mg/l)	Temp deg C
0.54	2	0	7.305	23.7

Discharge/Tributary Input Data for Segment 1

Flow (mgd)	cBOD5 (mg/l)	TKN (mg/l)	DO (mg/l)	Temp deg C
1.5	9.2	5.9	6	23.4

Hydraulic Information for Segment 1

Length (mi)	Width (ft)	Depth (ft)	Velocity (ft/sec)
3.66	17	0.41	0.44

Initial Mix Values for Segment 1

Flow (mgd)	DO (mg/l)	cBOD (mg/l)	nBOD (mg/l)	DOSat (mg/l)	Temp deg C
2.04	6.345	18.235	9.233	8.152	23.47941

Rate Constants for Segment 1. - (All units Per Day)

k1	k1@T	k2	k2@T	kn	kn@T	BD	BD@T
1	1.173	5.574	6.053	0.3	0.392	0	0

Output for Segment 1
Segment starts at VIRGINIA POULTRY GROWERS COOPERATIVE-HINTON

Total Dist. (mi)	Segm. Dist. (mi)	DO (mg/l)	cBOD (mg/l)	nBOD (mg/l)
0	0	6.345	18.235	9.233
0.1	0.1	6.16	17.94	9.183
0.2	0.2	5.995	17.65	9.133
0.3	0.3	5.848	17.365	9.083
0.4	0.4	5.717	17.084	9.034
0.5	0.5	5.601	16.808	8.985
0.6	0.6	5.499	16.536	8.936
0.7	0.7	5.41	16.269	8.887
0.8	0.8	5.333	16.006	8.839
0.9	0.9	5.266	15.747	8.791
1	1	5.209	15.492	8.743
1.1	1.1	5.161	15.242	8.696
1.2	1.2	5.121	14.996	8.649
1.3	1.3	5.088	14.754	8.602
1.4	1.4	5.062	14.516	8.555
1.5	1.5	5.042	14.281	8.509
1.6	1.6	5.027	14.05	8.463
1.7	1.7	5.017	13.823	8.417
1.8	1.8	5.012	13.6	8.371
1.9	1.9	5.011	13.38	8.326
2	2	5.014	13.164	8.281
2.1	2.1	5.02	12.951	8.236
2.2	2.2	5.029	12.742	8.191
2.3	2.3	5.041	12.536	8.147
2.4	2.4	5.055	12.333	8.103

2.5	2.5	5.071	12.134	8.059
2.6	2.6	5.089	11.938	8.015
2.7	2.7	5.109	11.745	7.971
2.8	2.8	5.131	11.555	7.928
2.9	2.9	5.154	11.368	7.885
3	3	5.178	11.184	7.842
3.1	3.1	5.204	11.003	7.799
3.2	3.2	5.231	10.825	7.757
3.3	3.3	5.258	10.65	7.715
3.4	3.4	5.286	10.478	7.673
3.5	3.5	5.315	10.309	7.631
3.6	3.6	5.344	10.142	7.59
3.66	3.66	5.362	10.043	7.565

Discharge/Tributary Input Data for Segment 2

Flow (mgd)	cBOD5 (mg/l)	TKN (mg/l)	DO (mg/l)	Temp deg C
0	2	0	7.314	23.7

Incremental Flow Input Dat a for Segment 2

Flow (mgd)	cBOD5 (mg/l)	TKN (mg/l)	DO (mg/l)	Temp deg C
0	2	0	7.358	23.7

Hydraulic Information for Segment 2

Length (mi)	Width (ft)	Depth (ft)	Velocity (ft/sec)
2.59	20	0.4	0.39

Initial Mix Values for Segment 2

Flow (mgd)	DO (mg/l)	cBOD (mg/l)	nBOD (mg/l)	DOSat (mg/l)	Temp deg C
2.04	5.362	10.043	7.565	8.176	23.47941

Rate Constants for Segment 2. - (All units Per Day)

k1	k1@T	k2	k2@T	kn	kn@T	BD	BD@T
1	1.173	20	21.72	0.4	0.523	0	0

Output for Segment 2
Segment starts at DRY RIVER

Total Dist. (mi)	Segm. Dist. (mi)	DO (mg/l)	cBOD (mg/l)	nBOD (mg/l)
3.66	0	5.362	10.043	7.565
3.76	0.1	5.966	9.86	7.503
3.86	0.2	6.399	9.68	7.442
3.96	0.3	6.711	9.504	7.381
4.06	0.4	6.936	9.331	7.321
4.16	0.5	7.099	9.161	7.261
4.26	0.6	7.218	8.994	7.202
4.36	0.7	7.306	8.83	7.143
4.46	0.8	7.358	8.669	7.085
4.56	0.9	7.358	8.511	7.027
4.66	1	7.358	8.356	6.97
4.76	1.1	7.358	8.204	6.913
4.86	1.2	7.358	8.055	6.857
4.96	1.3	7.358	7.908	6.801
5.06	1.4	7.358	7.764	6.746

5.16	1.5	7.358	7.623	6.691
5.26	1.6	7.358	7.484	6.636
5.36	1.7	7.358	7.348	6.582
5.46	1.8	7.358	7.214	6.528
5.56	1.9	7.358	7.083	6.475
5.66	2	7.358	6.954	6.422
5.76	2.1	7.358	6.827	6.37
5.86	2.2	7.358	6.703	6.318
5.96	2.3	7.358	6.581	6.266
6.06	2.4	7.358	6.461	6.215
6.16	2.5	7.358	6.343	6.164
6.25	2.59	7.358	6.239	6.119

Discharge/Tributary Input Data for Segment 3

Flow (mgd)	cBOD5 (mg/l)	TKN (mg/l)	DO (mg/l)	Temp deg C
6.87	2	0	7.347	23.7

Incremental Flow Input Data for Segment 3

Flow (mgd)	cBOD5 (mg/l)	TKN (mg/l)	DO (mg/l)	Temp deg C
0	2	0	7.354	23.7

Hydraulic Information for Segment 3

Length (mi)	Width (ft)	Depth (ft)	Velocity (ft/sec)
0.33	150	5	0.018

Initial Mix Values for Segment 3

Flow (mgd)	DO (mg/l)	cBOD (mg/l)	nBOD (mg/l)	DOSat (mg/l)	Temp deg C
8.87	7.35	5.285	1.407	8.171	23.64927

Rate Constants for Segment 3. - (All units Per Day)

k1	k1@T	k2	k2@T	kn	kn@T	BD	BD@T
0.5	0.591	7.273	7.93	0.15	0.199	0	0

Output for Segment 3

Segment starts at NORTH RIVER

Total Dist. (mi)	Segm. Dist. (mi)	DO (mg/l)	cBOD (mg/l)	nBOD (mg/l)	
6.25	0	7.35	5.285	1.407	
6.35	0.1	7.354	5	1.315	
6.45	0.2	7.354	5	1.229	
6.55	0.3	7.354	5	1.149	
6.58	0.33	7.354	5	1.126	END OF FILE

APPENDIX D

RATIONALE FOR TOXICS MANAGMENT PROGRAM REQUIREMENTS

Outfall 001: This industrial discharge meets the Applicability Criteria for a Facility to Perform Aquatic Toxicity Tests, because the Instream Waste Concentration (IWC) is greater than or equal to 33% (Section IV.1.B. of Guidance Memorandum 00-2012) and this discharge is deemed to have the potential for toxicity (Section IV.1.C.). The 'potential for toxicity' was evident in testing during previous permit terms, which resulted in the determination of a chronic WET limit for the discharge.

The procedure for evaluating the results of the toxicity testing from the current permit term is outlined in the TMP Guidance. This involves expressing the results of the tests as Toxicity Units (TU) and entering them separately, by species, into the Agency's STAT.exe program. The acute and chronic WLAs ($WLA_{a,c}$, WLA_a, and WLA_c) necessary to run STAT.exe are generated by the WETLIM10.xls spreadsheet. The WLAs in WETLIM10.xls are based on the current operating flow tier of 1.1 MGD and the actual design flow of 1.5 MGD, and a 1Q10 of 0.46 MGD and a 7Q10 of 0.54 MGD. The calculations are shown on the following pages and have been conducted for each flow tier.

Based on an evaluation of the chronic data at the both flow tiers, chronic WET limits (TU_c) continue to be required at this time. The limits and recommended dilution series of the current permit have been adjusted slightly to account for changes in stream flows. WETLIM10.xls spreadsheet results are included in this appendix and are summarized below.

Flow Tier (MGD)	WET Limit (TUc)	NOEC	Recommended Dilution Series
1.1	2.17	= 46%	100%, 68%, 46%, 32%, 22%
1.5	1.96	= 51%	100%, 72%, 51%, 37%, 26%

Additional information at this reissuance for stream flow resulted in the determination of less stringent WET limits. Because new information is available which would have justified less stringent limits when the previous limits were established, had that information been available, the less stringent WET limits in this permit reissuance comply with the Antibacksliding provisions of the VPDES Permit Regulation.

A most sensitive species has not previously been determined, and current data do not meet the conditions to require testing of only one species, so future chronic tests should continue to use two species. Based on an evaluation of the variability of the data and using BPJ, the frequency of monitoring will be continued as annual. If future data suggests high variability in the results, the testing frequency may be increased.

Since the current design flow is 1.5 MGD, and the move to this higher flow tier is anticipated to result in little or no change in processes or treatment (simply an increase in flow), there is no need to recharacterize the waste stream by performing a year of quarterly sampling. Therefore, the frequency of monitoring will be continued on an annual basis unless future data suggest problems or high variability in the results. The annual sampling was previously established as being required in January of each year. This was based upon the facility's past performance and the potential for cold weather treatment problems. This sampling period remains unchanged at this reissuance.

There is no acute data to evaluate at this time since acute monitoring was removed at a previous reissuance. Should existing monitoring indicate that acute toxicity may be a concern, acute monitoring can be required at that time.

Outfalls 002 and 003: Toxics monitoring of these outfalls is not required at this time as the discharges do not meet the Applicability Criteria for a Facility to Perform Aquatic Toxicity Tests outlined in Section IV.1. of Guidance Memorandum 00-2012.

WETLIM10.xls Output - 1.1 MGD Flow Tier:

Spreadsheet for determination of WET test endpoints or WET limits

Excel 97		Acute Endpoint/Permit Limit				Use as LC_{50} in Special Condition, as TUa on DMR						
Revision Date: 01/10/05												
File: WETLIM10.xls		ACUTE	100% =	NOAEC		LC_{50} =	NA	% Use as	NA	TUa		
(MIX.EXE required also)												
		ACUTE WLAa		0.4254545		Note: Inform the permittee that if the mean of the data exceeds						
						this TUa:	1.0		a limit may result using WLA.EXE			
		Chronic Endpoint/Permit Limit				Use as NOEC in Special Condition, as TUc on DMR						
		CHRONIC	2.18056589	TU_c		NOEC =	46	% Use as	2.17	TU_c		
		BOTH*	4.25454556	TU_c		NOEC =	24	% Use as	4.16	TU_c		
Enter data in the cells with blue type:		AML	2.18056589	TU_c		NOEC =	46	% Use as	2.17	TU_c		
Entry Date:	09/18/09	ACUTE WLAa,c		4.2545455		Note: Inform the permittee that if the mean						
Facility Name:	Virginia Poultry Growers C	CHRONIC WLAc		1.4909091		of the data exceeds this TUc:				1.0		
VPDES Number:	VA0002313	* Both means acute expressed as chronic				a limit may result using WLA.EXE						
Outfall Number:	001											
		% Flow to be used from MIX.EXE				Difuser /modeling study?						
Plant Flow:	1.1 MGD					Enter Y/N	N					
Acute 1Q10:	0.46 MGD	100 %				Acute	1	:1				
Chronic 7Q10:	0.54 MGD	100 %				Chronic	1	:1				
Are data available to calculate CV? (Y/N)		N	(Minimum of 10 data points, same species, needed)						Go to Page 2			
Are data available to calculate ACR? (Y/N)		N	(NOEC<LC50, do not use greater/less than data)						Go to Page 3			
IWC_a	70.51282051 %	Plant flow/plant flow + 1Q10		NOTE: If the IWCa is >33%, specify the								
IWC_c	67.07317073 %	Plant flow/plant flow + 7Q10		NOAEC = 100% test/endpoint for use								
Dilution, acute	1.418181818	100/IWCa										
Dilution, chronic	1.490909091	100/IWCc										
WLA_a	0.425454545	Instream criterion (0.3 TUa) X's Dilution, acute										
WLA_c	1.490909091	Instream criterion (1.0 TUc) X's Dilution, chronic										
$WLA_{a,c}$	4.254545455	ACR X's WLA_a - converts acute WLA to chronic units										
ACR -acute/chronic ratio	10	LC50/NOEC (Default is 10 - If data are available, use tables Page 3)										
CV-Coefficient of variatio	0.6	Default of 0.6 - If data are available, use tables Page 2)										
Constants eA	0.4109447	Default = 0.41										
eB	0.6010373	Default = 0.60										
eC	2.4334175	Default = 2.43										
eD	2.4334175	Default = 2.43 (1 samp)	No. of sample	1		**The Maximum Daily Limit is calculated from the lowest						
						LTA, X's eC. The LTAa,c and MDL using it are driven by the ACR.						
$LTA_{a,c}$	1.748382905	WLAa,c X's eA										
LTA_c	0.896091975	WLAc X's eB								Rounded NOEC's		%
MDL** with LTA_{ac}	4.254545559	TU_c	NOEC =	23.504273		(Protects from acute/chronic toxicity)				NOEC =	24	%
MDL** with LTA_c	2.180565892	TU_c	NOEC =	45.859655		(Protects from chronic toxicity)				NOEC =	46	%
AML with lowest LTA	2.180565892	TU_c	NOEC =	45.859655		Lowest LTA X's eD				NOEC =	46	
IF ONLY ACUTE ENDPOINT/LIMIT IS NEEDED, CONVERT MDL FROM TU_c to TU_a												

		Monitoring		Limit	
Table 4.		% Effluent	TUc	% Effluent	TUc
Dilution series based on data mean		100	1.0		
Dilution series to use for limit				46	2.173913
Dilution factor to recommend:		0.5		0.678233	
Dilution series to recommend:		100.0	1.00	100.0	1.00
		50.0	2.00	67.8	1.47
		25.0	4.00	46.0	2.17
		12.5	8.00	31.2	3.21
		6.25	16.00	21.2	4.73
Extra dilutions if needed		3.12	32.05	14.4	6.97
		1.56	64.10	9.7	10.27

STAT.exe Results - 1.1 MGD Flow Tier:

```
Chemical  = Chronic Toxicity - C.dubia
Chronic averaging period =  4
WLAa     =  4.2545455
WLAc     =  1.4909091
Q.L.       = 1.0
# samples/mo. = 1
# samples/wk. = 1

Summary of Statistics:

# observations = 5
Expected Value =  1.088
Variance       =  .426147
C.V.           = 0.6
97th percentile daily values  =  2.64755
97th percentile 4 day average =  1.81020
97th percentile 30 day average=  1.31218
# < Q.L.        =  0
Model used      = BPJ Assumptions, type 2 data

A limit is needed based on Chronic Toxicity
Maximum Daily Limit    = 2.1805660549755
Average Weekly limit   = 2.1805660549755
Average Monthly Limit = 2.1805660549755

The data are: 1.44, 1, 1, 1, 1
```

```
Chemical  = Chronic Toxicity - P.promelas
Chronic averaging period =  4
WLAa     =  4.2545455
WLAc     =  1.4909091
Q.L.       = 1.0
# samples/mo. = 1
# samples/wk. = 1

Summary of Statistics:

# observations = 5
Expected Value =  1.088
Variance       =  .426147
C.V.           = 0.6
97th percentile daily values  =  2.64755
97th percentile 4 day average =  1.81020
97th percentile 30 day average=  1.31218
# < Q.L.        =  0
Model used      = BPJ Assumptions, type 2 data

A limit is needed based on Chronic Toxicity
Maximum Daily Limit    = 2.1805660549755
Average Weekly limit   = 2.1805660549755
Average Monthly Limit = 2.1805660549755

The data are: 1.44, 1, 1, 1, 1
```

WETLIM10.xls Output - 1.5 MGD Flow Tier:

Spreadsheet for determination of WET test endpoints or WET limits

Excel 97		Acute Endpoint/Permit Limit			Use as LC50 in Special Condition, as TUa on DMR					
Revision Date: 01/10/05										
File: WETLIM10.xls (MDLEXE required also)		ACUTE	100% =	NOAEC	LC50 =	NA	% Use as	NA	TUa	
		ACUTE WLAa		0.392	Note: Inform the permittee that if the mean of the data exceeds this TUa:	1.0	a limit may result using WLA.EXE			
		Chronic Endpoint/Permit Limit			Use as NOEC in Special Condition, as TUc on DMR					
		CHRONIC	1.98910157	TUc	NOEC =	51	% Use as	1.96	TUc	
		BOTH*	3.9200001	TUc	NOEC =	26	% Use as	3.84	TUc	
Enter data in the cells with blue type:		AML	1.98910157	TUc	NOEC =	51	% Use as	1.96	TUc	
Entry Date:	09/18/09	ACUTE WLAa,c		3.92	Note: Inform the permittee that if the mean					
Facility Name:	Virginia Poultry Growers C	CHRONIC WLAc		1.36	of the data exceeds this TUc:			1.0		
VPDES Number:	VA0002313	* Both means acute expressed as chronic			a limit may result using WLA.EXE					
Outfall Number:	001									
		% Flow to be used from MIX.EXE			Diffuser /modeling study?					
Plant Flow:	1.5 MGD				Enter Y/N	N				
Acute 1Q10:	0.46 MGD	100 %			Acute	1	:1			
Chronic 7Q10:	0.54 MGD	100 %			Chronic	1	:1			
Are data available to calculate CV? (Y/N)		N	(Minimum of 10 data points, same species, needed)					Go to Page 2		
Are data available to calculate ACR? (Y/N)		N	(NOEC<LC50, do not use greater/less than data)					Go to Page 3		
IWCa	76.53061224 %	Plant flow/plant flow + 1Q10	NOTE: If the IWCa is >33%, specify the							
IWCc	73.52941176 %	Plant flow/plant flow + 7Q10	NOAEC = 100% test/endpoint for use							
Dilution, acute	1.306666667	100/IWCa								
Dilution, chronic	1.36	100/IWCc								
WLAa	0.392	Instream criterion (0.3 TUa) X's Dilution, acute								
WLAc	1.36	Instream criterion (1.0 TUc) X's Dilution, chronic								
WLAa,c	3.92	ACR X's WLAa - converts acute WLA to chronic units								
ACR -acute/chronic ratio	10	LC50/NOEC (Default is 10 - If data are available, use tables Page 3)								
CV-Coefficient of variation	0.6	Default of 0.6 - If data are available, use tables Page 2)								
Constants eA	0.4109447	Default = 0.41								
eB	0.6010373	Default = 0.60								
eC	2.4334175	Default = 2.43								
eD	2.4334175	Default = 2.43 (1 samp)	No. of sample	1	**The Maximum Daily Limit is calculated from the lowest LTA, X's eC. The LTAa,c and MDL using it are driven by the ACR.					
LTAa,c	1.610903224	WLAa,c X's eA								
LTAc	0.817410728	WLAc X's eB						Rounded NOEC's		%
MDL** with LTAa,c	3.920000096	TUc	NOEC =	25.510203	(Protects from acute/chronic toxicity)			NOEC =	26	%
MDL** with LTAc	1.98910157	TUc	NOEC =	50.273954	(Protects from chronic toxicity)			NOEC =	51	%
AML with lowest LTA	1.98910157	TUc	NOEC =	50.273954	Lowest LTA X's eD			NOEC =	51	
IF ONLY ACUTE ENDPOINT/LIMIT IS NEEDED, CONVERT MDL FROM TUa to TUc										
								Rounded LC50's		%
MDL with LTAa,c	0.39200001	TUa	LC50 =	255.102035	%	Use NOAEC=100%		LC50 =	NA	%
MDL with LTAc	0.198910157	TUa	LC50 =	502.739536	%	Use NOAEC=100%		LC50 =	NA	

DILUTION SERIES TO RECOMMEND			
Table 4.	Monitoring		Limit	
	% Effluent	TUc	% Effluent	TUc
Dilution series based on data mean	100	1.0		
Dilution series to use for limit			51	1.9607843
Dilution factor to recommend:	0.5		0.7141428	
Dilution series to recommend:	100.0	1.00	100.0	1.00
	50.0	2.00	71.4	1.40
	25.0	4.00	51.0	1.96
	12.5	8.00	36.4	2.75
	6.25	16.00	26.0	3.84
Extra dilutions if needed	3.12	32.05	18.6	5.38
	1.56	64.10	13.3	7.54

STAT.exe Results - 1.5 MGD Flow Tier:

```
Chemical  = Chronic Toxicity - C.dubia
Chronic averaging period =  4
WLAa     =  3.92
WLAc     =  1.36
Q.L.       = 1.0
# samples/mo. = 1
# samples/wk. = 1

Summary of Statistics:

# observations = 5
Expected Value =  1.088
Variance       =  .426147
C.V.           = 0.6
97th percentile daily values  =  2.64755
97th percentile 4 day average =  1.81020
97th percentile 30 day average=  1.31218
# < Q.L.       =  0
Model used     = BPJ Assumptions, type 2
data


A limit is needed based on Chronic Toxicity
Maximum Daily Limit    = 1.9891017063124
Average Weekly limit   = 1.9891017063124
Average Monthly Limit = 1.9891017063124


The data are:1.44, 1, 1, 1, 1
```

```
Chemical  = Chronic Toxicity - P.promelas
Chronic averaging period =  4
WLAa     =  3.92
WLAc     =  1.36
Q.L.       = 1.0
# samples/mo. = 1
# samples/wk. = 1

Summary of Statistics:

# observations = 5
Expected Value =  1.088
Variance       =  .426147
C.V.           = 0.6
97th percentile daily values  =  2.64755
97th percentile 4 day average =  1.81020
97th percentile 30 day average=  1.31218
# < Q.L.       =  0
Model used     = BPJ Assumptions, type 2
data


A limit is needed based on Chronic Toxicity
Maximum Daily Limit    = 1.9891017063124
Average Weekly limit   = 1.9891017063124
Average Monthly Limit = 1.9891017063124


The data are:1.44, 1, 1, 1, 1
```

APPENDIX E

PERMIT CHANGES AND BASES FOR SPECIAL CONDITIONS

Tabulated below are the sections of the permit, with any changes and the reasons for the changes identified. Also provided is the basis for each of the permit special conditions.

Cover Page

- Content and format as prescribed by the VPDES Permit Manual.
- The city reference was removed.

Part I.A.1. **Effluent Limitations and Monitoring Requirements (Outfall 001) - 1.1 MGD Flow Tier :** Bases for effluent limits provided in previous pages of this fact sheet. Monitoring requirements as prescribed by the VPDES Permit Manual.

Updates Part I.A.1. of the previous permit with the following:

- The monitoring frequency for pH was changed from 1/Month to 1/Day.
- BOD_5 (Jan-May) and Ammonia-N (Jan-May) limits were removed.
- The monitoring frequencies for BOD_5 and Ammonia-N were changed from 1/Month to 1/Week.
- TRC limits were relocated to Part I.B. of the permit.
- Monitoring and a limit for E. coli were added.
- A more stringent monthly average loading limit for Nitrate was included.
- A less stringent WET limit was included.
- The monitoring requirements for Orthophosphate, Total Phosphorus, Total Phosphorus (kg/month), Total Phosphorus (kg/calendar year), TKN, Nitrate plus Nitrite, Total Nitrogen (kg/month), and Total Nitrogen (kg/calendar year) were removed.
- A footnote regarding Oil and Grease monitoring was added.
- A footnote referencing this facility's coverage under the Nutrient General Permit was added.

Part I.A.2. **Effluent Limitations and Monitoring Requirements (Outfall 001) - 1.5 MGD Flow Tier:** Bases for effluent limits provided in previous pages of this fact sheet. Monitoring requirements as prescribed by the VPDES Permit Manual.

Updates Part I.A.2. of the previous permit with the following:

- The monitoring frequency for pH was changed from 1/Month to 1/Day.
- BOD_5 (Jan-May) and Ammonia-N (Jan-May) limits were removed.
- The monitoring frequencies for BOD_5 and Ammonia-N were changed from 1/Month to 1/Week.
- TRC limits were relocated to Part I.B. of the permit.
- Monitoring and a limit for E. coli were added.
- A more stringent monthly average loading limit for Nitrate was included.
- A less stringent WET limit was included.
- The monitoring requirements for Orthophosphate, Total Phosphorus, Total Phosphorus (kg/month), Total Phosphorus (kg/calendar year), TKN, Nitrate plus Nitrite, Total Nitrogen (kg/month), and Total Nitrogen (kg/calendar year) were removed.
- A footnote regarding Oil and Grease monitoring was added.
- A footnote referencing this facility's coverage under the Nutrient General Permit was added.

Part I.A.3. **Effluent Limitations and Monitoring Requirements (Outfall 101) - Sewage Treatment Works:** Bases for effluent limits provided in previous pages of this fact sheet. Monitoring requirements as prescribed b the VPDES Permit Manual.

Updates Part I.A.3. of the previous permit with the following:

- TRC limits were relocated to Part I.B. of the permit.
- Monitoring and a limit for E. coli were added.
- A footnote referencing alternative disinfection requirements was added.
- The footnote regarding minimum TRC requirements was relocated to Part I.B. of the permit.

Part I.A.4. **Effluent Limitations and Monitoring Requirements (Outfalls 002 and 003):** *Identical to Part I.A.4. of the previous permit.*

Part I.B. **TRC Effluent Limitations and Monitoring Requirements:** *Updates Part I.B. of the previous permit.* Specifies both disinfection and effluent limits and monitoring requirements should the permittee elect to switch from alternate disinfection to chlorine disinfection. Required by Sewage Collection and Treatment (SCAT) Regulations and 9 VAC 25-260-170, Bacteria; other waters. Also, 40 CFR 122.41(e) requires the permittee, at all times, to properly operate and maintain all facilities and systems of treatment in order to comply with the permit. This ensures proper operation of chlorination equipment to maintain adequate disinfection.

Part I.C. **Effluent Limitations and Monitoring Requirements – Additional Instructions:** *Updates Part I.C. of the previous permit.* Authorized by VPDES Permit Regulation, 9 VAC 25-31-190 J 4 and 220 I. This condition is necessary when a maximum level of quantification and/or a specific analytical method is required in order to assess compliance with a permit limit or to compare effluent quality with a numeric criterion. The condition also establishes protocols for calculation of reported values..

Part I.D. **WET Limitations and Monitoring Requirements:** *Updates Part I.D. of the previous permit.* VPDES Permit Regulation, 9 VAC 25-31-210 and 220 I, requires monitoring in the permit to provide for and assure compliance with all applicable requirements of the State Water Control Law and the Clean Water Act.

Part I.E.1. **95% Capacity Reopener:** *Updates Part I.E.1. of the previous permit.* Required by VPDES Permit Regulation, 9 VAC 25-31-200 B 4 for certain permits. Included for this facility to ensure that adequate treatment capacity will continue to be provided as influent flows and/or loadings increase.

Part I.E.2. **Materials Handling/Storage:** *Identical to Part I.E.2. of the previous permit.* 9 VAC 25-31-280.B.2. requires that the types and quantities of "wastes, fluids, or pollutants which are … treated, stored, etc." be addressed for all permitted facilities.

Part I.E.3. **O&M Manual Requirement:** *Updates Part I.E.3. of the previous permit.* Code of Virginia at 62.1-44.16, VPDES Permit Regulation 9 VAC 25-31-190 E, and 40 CFR 122.41(e) require proper operation and maintenance of the permitted facility. Added requirement to describe procedures for documenting compliance with the permit requirement that there shall be no discharge of floating solids or visible foam in other than trace amounts.

Part I.E.4. **Concept Engineering Report (CER) Requirement:** *New requirement.* 9 VAC 25-40-70 A authorizes DEQ to include technology-based annual concentration limits in the permits of facilities that have installed nutrient control equipment, whether by new construction, expansion or upgrade.

Part I.E.5. **CTC/CTO Requirement:** *Identical to Part I.E.13. of the previous permit:* Required by Code of Virginia 62.1-44.19, SCAT Regulations 9 VAC 25-790, and VPDES Permit Regulation 9 VAC 25-31-190 E for all STPs. 9 VAC 25-40-70 A authorizes DEQ to include technology-based annual concentration limits in the permits of facilities that have installed nutrient control equipment, whether by new construction, expansion or upgrade.

Part I.E.6. **SMP Requirement:** *Updates Part I.E.5. of the previous permit.* VPDES Permit Regulation 9 VAC 25-31-100 P, 220 B 2, and 420 through 720, and 40 CFR Part 503 require all treatment works treating domestic sewage to submit information on their sludge use and disposal practices and to meet specified standards for sludge use and disposal. Technical requirements are derived from the Virginia Pollution Abatement Permit Regulation (9 VAC 25-32-10 *et seq.*)

Part I.E.7. **Licensed Operator Requirement:** *Identical to Part I.E.6. of the previous permit.* The VPDES Permit Regulation 9 VAC 25-31-200 C, the Code of Virginia 54.1-2300 et seq., and Rules and Regulations for Waterworks and Wastewater Works Operators 18 VAC 160-20-10 et seq., require licensure of operators. A class II license is indicated for this facility.

Part I.E.8. **Reliability Class:** *Identical to Part I.E.7. of the previous permit.* Required by SCAT Regulations 9 VAC 25-790. Class II status was assigned to this facility on July 23, 2002.

Part I.E.9. **Water Quality Criteria Monitoring:** *Identical to Part I.E.8. of the previous permit.* State Water Control Law at 62.1-44.21 authorizes the Board to request information needed to determine the discharge's impact on State waters. States are required to review data on discharges to identify actual or potential toxicity problems, or the attainment of water quality goals, according to 40 CFR Part 131, Water Quality Standards, subpart 131.11. To ensure that water quality criteria are maintained, the permittee is required to analyze the facility's effluent for the substances noted in Attachment A of this VPDES permit.

Part I.E.10. **Treatment Works Closure Plan:** *Updates Part I.E.14. of the previous permit.* Required for all STPs per the State Water Control Law at 62.1-44.18.C. and 62.1-44.15:1.1., and the SCAT Regulations at 9 VAC 25-790-450.E. and 9 VAC 25-790-120.E.3.

Part I.E.11. **Reopeners:**

Identical to Part I.E.12. of the previous permit: a. Section 303(d) of the Clean Water Act requires that total maximum daily loads (TMDLs) be developed for streams listed as impaired. This special condition is to allow the permit to be reopened if necessary to bring it into compliance with any applicable TMDL approved for the receiving stream. The reopener recognizes that, according to section 402(o)(1) of the Clean Water Act, limits and/or conditions may be either more or less stringent than those contained in this permit. Specifically, they can be relaxed if they are the result of a TMDL, basin plan, or other WLA prepared under section 303 of the Act.

New Requirement: b. 9 VAC 25-40-70 A authorizes DEQ to include technology-based annual concentration limits in the permits of facilities that have installed nutrient control equipment, whether by new construction, expansion or upgrade.

Identical to Part I.E.9. of the previous permit: c. 9 VAC 25-31-390 A authorizes DEQ to modify VPDES permits to promulgate amended water quality standards.

Identical to Part I.E.4. of the previous permit: d. Required by the VPDES Permit Regulation, 9 VAC 25-31-220.C, for all permits issued to STPs.

Part I.E.12 **Notification Levels:** *Identical to Part I.E.15. of the previous permit.* Required by the VPDES Permit Regulation 9 VAC 25-31-200 A for all manufacturing, commercial, mining, and silvicultural dischargers.

Part I.F.1. **General Storm Water Special Conditions** : *Updates Part F.1. of the previous permit.* VPDES Permit Regulation 9 VAC 25-31-10 defines discharges of storm water from industrial activity in 9 industrial categories. 9 VAC 25-31-120 requires a permit for these discharges. The Storm Water Pollution Prevention Plan requirements of the permit are derived from the VPDES general permit for discharges of storm water associated with industrial activity, 9 VAC 25-151-10 et seq. VPDES Permit Regulation, 9 VAC 25-31-220 K, requires use of best management practices where applicable to control or abate the discharge of pollutants when numeric effluent limits are infeasible or the practices are necessary to achieve effluent limit or to carry out the purpose and intent of the Clean Water Act and State Water Control Law.

Part I.F.2. **Storm Water Pollution Prevention Plan**: *Updates Part I.F.2. of the previous permit.* See rationale listed above for the General Storm Water Special Conditions.

Part I.F.3. **Sector-Specific Storm Water Pollution Prevention Plan Requirements**: *Updates Part I.F.3. of the previous permit.* See rationale listed above for the General Storm Water Special Conditions.

DELETIONS

Tabulated below are the sections of the previous permit that were deleted and the basis for this action.

Part I.E.10. **Basis of Design Report for Nutrient Removal:** This requirement was removed at this reissuance in accordance with the current nutrient guidance.

Part I.E.11. **Interim Optimization Plan for Nutrient Removal:** This requirement was removed at this reissuance in accordance with the current nutrient guidance.

Public Notice – Environmental Permit

PURPOSE OF NOTICE: To seek public comment on a draft permit from the Department of Environmental Quality that will allow the continued release of treated wastewater/storm water into a water body in Rockingham County, Virginia.

First Public Notice Issue Date: **(to be supplied by newspaper)**

PUBLIC COMMENT PERIOD: 30 days following first public notice issue date
PERMIT NAME AND NUMBER: Virginia Pollutant Discharge Elimination System Permit – Wastewater (VA0002313) issued by DEQ, under the authority of the State Water Control Board
NAME AND ADDRESS OF APPLICANT: Virginia Poultry Growers Cooperative, Inc; PO Box 228, Hinton, VA 22831
NAME AND ADDRESS OF FACILITY: Virginia Poultry Growers Cooperative-Hinton; 6349 Rawley Pike, Hinton
PROJECT DESCRIPTION: Virginia Poultry Growers Cooperative, Inc has applied for reissuance of the referenced permit. The applicant proposes to release treated sewage wastewater/industrial wastewater/storm water at a rate of 1.5 million gallons per day into Muddy Creek and War Branch in Rockingham County in the Muddy Creek watershed. A watershed is the land area drained by a river and its incoming streams. The permit will limit the following pollutants to amounts that protect water quality: organic matter, solids, chlorine, bacteria, ammonia, dissolved oxygen, pH, nutrients, and toxicity. Sewage sludge from the treatment process will be hauled to North River WWTF where it will undergo further treatment. Industrial sludge from the treatment process will be hauled to Valley Proteins-Linville.

This facility is subject to the requirements of 9 VAC 25-820 and has registered for coverage under the General VPDES Watershed Permit Regulation for Total Nitrogen and Total Phosphorus Discharges and Nutrient Trading in the Chesapeake Bay Watershed in Virginia.

HOW TO COMMENT AND/OR REQUEST A PUBLIC HEARING: DEQ accepts comments and requests for public hearing by e-mail, fax or postal mail. All comments and requests must be in writing and be received by DEQ during the comment period. Submittals must include the names, mailing addresses and telephone numbers of the commenter/requester and of all persons represented by the commenter/requester. A request for public hearing must also include: 1) The reason why a public hearing is requested. 2) A brief, informal statement regarding the nature and extent of the interest of the requester or of those represented by the requestor, including how and to what extent such interest would be directly and adversely affected by the permit. 3) Specific references, where possible, to terms and conditions of the permit with suggested revisions. DEQ may hold a public hearing, including another comment period, if public response is significant and there are substantial, disputed issues relevant to the permit.
CONTACT FOR PUBLIC COMMENTS, DOCUMENT REQUESTS AND ADDITIONAL INFORMATION:
Name: Brandon Kiracofe
Address: Valley Regional Office, 4411 Early Road, P.O. Box 3000, Harrisonburg, Virginia, 22801
Phone: (540) 574-7892 E-mail: brandon.kiracofe@deq.virginia.gov Fax: (540) 574-7878
The public may review the draft permit and application at the DEQ office named above.

Vender Letter

VIRGINIA POULTRY GROWERS COOPERATIVE

HINTON PROCESSING PLANT

Street Address:
6349 Rawley Pike
Hinton, VA 22831
540-867-4028

(Date)

(Name of Vendor)
(Address of Vendor)

Dear (Vendor):

VENDOR LETTER REGARDING LOADING AND UNLOADING OPERATIONS AT VIRGINIA POULTRY GROWERS COOPERATIVE FACILITIES

This letter is to inform your company of certain requirements associated with the unloading or loading operations at the Virginia Poultry Growers Cooperative facilities. The driver must meet the following requirements for each delivery:

1. Prior to loading and unloading activities, driver should make certain he/she is aware of the facilities' emergency contact protocols; in most cases, onsite security personnel will have telephone number for the Safety Manager and Haz-mat Team Members. Remain in the *immediate area* of the unloading operation to oversee the operation and to respond immediately to any problems that might arise. *This does not mean sitting or sleeping in the cab of the truck. Immediate area is defined as remaining on the side of the vehicle within 8 feet of the main shutoff valve.* All other matters must be completed either prior to or after product is unloaded, not during unloading.

2. Ensure all equipment, hoses and couplings used in the unloading operation are in good condition and all connections to trailer and fill pipe are secure prior to unloading product. If, in the opinion of the driver, the Virginia Poultry Growers Cooperative fill pipe is unsafe for delivery, he/she should report this to Virginia Poultry Growers Cooperative personnel prior to unloading product.

3. Report any release/spill/discharge *immediately* to Virginia Poultry Growers Cooperative personnel. Any materials released due to faulty vehicle equipment or driver negligence shall be the responsibility of the vendor and any cleanup costs associated with release shall be borne by the vendor.

4. Ensure that a drip pan or bucket is placed under the fill pipe connection when the fill pipe connection is located outside of the containment area. If no drip pan is available, contact Virginia Poultry Growers Cooperative personnel prior to unloading product. Any release from the connection during unloading or disconnection of the coupling that is not contained in the drip pan, shall be the responsibility of the vendor and shall be cleaned up by the driver.

5. Vendor will ensure that all of its drivers are trained in the operation of all vendors and Virginia Poultry Growers Cooperative equipment required to safely complete the loading or unloading of materials. This will include proper operation of valves and end caps on tank fill lines. The driver is responsible for checking the void space in the AST or tanker versus the amount of fuel, oil or fat to be pumped prior to beginning transfer operations.

6. Deliveries will be made during daylight hours in accordance with a schedule determined by Virginia Poultry Growers Cooperative. If a delivery must be scheduled during nighttime hours, Virginia Poultry Growers Cooperative personnel must be present to oversee the operation.

We appreciate your cooperation in this matter and request this information be disseminated to all drivers making deliveries to the Virginia Poultry Growers Cooperative facilities. Please fax a signed copy of this letter to me at (540) 867-4320 and/or mail a copy to Phil Miller, Virginia Poultry Growers Cooperative, PO Box 228, 6349 Rawley Pike, Hinton, VA 22831.

Sincerely,

Phil Miller

Phil Miller
Industrial Coop Engineering Manager

The above requirements are accepted:

_____
Company Name

_____
Printed Name of Company Official

_____
Signature of Company Official

_____
Date

Virginia Poultry Growers Cooperative
PO Box 228
6349 Rawley Pike
Hinton, VA 22831

Spill Event Form

VIRGINIA POULTRY GROWERS COOPERATIVE

HINTON PROCESSING PLANT

Street Address:
6349 Rawley Pike
Hinton, VA 22831
540-867-4028

SPILL EVENT DOCUMENTATION FORM

1. Facility Name: Hinton Processing Plant Date and Time of Spill:_____

2. Name of person completing Form:_____

3. Location Of Spill:_____

4. Product Released
   _____Diesel Fuel
   _____No. 2 Fuel Oil
   _____Fat
   _____Lubricating Oil
   _____Used Oil
   _____Hydraulic Oil
   _____Other_____

   Release Quantity
   _____0 – 10 gallons
   _____11 – 100 gallons
   _____101 – 1,000 gallons
   _____1,001 – 10,000 gallons
   _____> 10,000

   Volume of Product Recovered
   _____ gallons

5. Is a waterway impacted? _____Yes _____ No

6. Name of receiving waterway or drainage structure:_____

7. If a waterway is impacted will release cause significant environmental/water quality damage?
   _____Yes _____No

8. Are any soils impacted by the spill? _____Yes _____ No

9. Description of vessel or tank releasing product: _____
   _____

10. Description of Physical Damage and cost estimate of damage:_____
    _____

11. Cause of Release: _____
    _____

12. Actions taken to contain / mitigate release: _____
    _____
    _____

13. Regulatory and Other Internal and External Notifications:
    Contact Name:_____ Date:_____ Time:_____
    Contact Name:_____ Date:_____ Time:_____
    Contact Name:_____ Date:_____ Time:_____
    Contact Name:_____ Date:_____ Time:_____
    Continue on separate sheet of paper if required.

14. Actions Taken to Prevent Recurrence:_____
    _____

Emergency Notification Procedures

1. *If fuel, oil or chemical spill is less than 25 gallons*, notify immediate supervisor and the supervisor shall notify the Facility Environmental Manager.

		Office Phone	Cell Phone
Facility Environmental Manager	Ron Harrison	(540) 867-4366	None
Director of Production	Mickey Baugher	(540 867-4000	(540) 560-3742
Spill Response Contractor	Holtzman Oil	(540) 477-3131	

2. *If a gasoline fuel spill exceeds 25 gallons or a diesel fuel (or No.2 Fuel Oil) spill exceeds 75 gallons,* the Facility Environmental Manager, with the assistance of the General Manager, shall notify the Virginia Department of Environmental Quality (VA-DEQ).

	normal hours	after hours & holidays
VA Department of Environment Quality	(540) 574-7800	(800) 468-8892

3. *If a fuel/oil/chemical spill of any size discharges or threatens to discharge into a drainage ditch or waterway* the Facility Environmental Manager with the assistance of the General Manager, shall notify the VA-DEQ and the National Response Center (NRC).

	National Response Center
Environmental Protection Agency Region 3	(800) 424-8802

4. *If a fuel/oil/chemical spill of any size could adversely impact the publicly owned wastewater collection and treatment systems*, the Facility Environmental Manager with the assistance of the General Manager, shall notify the Town of Broadway.

Town of Broadway (wastewater treatment plant) (540) 896-7523

5. If the discharge consists of 1,000 gallons or more of fuel, chemical or oil or if two reportable spill events have occurred at this Facility within the past 12 month period, which have impacted a waterway, then, within 60 days after a spill, the General Manager or designated representative shall provide in writing the following information to the USEPA (Region III) with a copy to the VA-DEQ:

   - A complete copy of the SPCC Plan with any amendments;
   - The cause(s) of the spill(s);
   - The corrective actions taken to control the spill. Include a description of new, repaired, or replaced equipment;
   - Additional preventative measures taken to minimize the possibility of recurrence; and
   - Other applicable information.

History of Significant Spills and Leaks

Event Date	Spill or Leak?	Location of Event	Type of material	Quantity of material	Response Procedures	Proper notice?	Outcome and follow-up

Training Log / Form

VIRGINIA POULTRY GROWERS COOPERATIVE

HINTON PROCESSING PLANT

Street Address:
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Hinton, VA 22831
540-867-4028

TRAINING LOG FORM

Stormwater Pollution Prevention Training Log

Instructor's Name(s):

Instructor's Title(s):

Course Location: _____ Date: _____

Course Length (hours): _____

Stormwater Training Topic: *(check as appropriate)*

- ☐ **SWPPP**
- ☐ **SPCC**
- ☐ **SWMP**
- ☐ **GWPD**
- ☐ **SR & CP**

Specific Training Objective: _____

_____

Attendee Roster: *(attach additional pages as necessary)*

No.	Name of Attendee	Company
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		

Lab Results

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Miscellaneous

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